DOCUMENT RESUME

ED 339 833 CE 059 739

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TITLE Economic Costs and Benefits of Lifelong Learning in Livingston, Montana.
SPONS AGENCY Montana State Univ., Bozeman. Center for Adult Learning Research.
PUB DATE 88
NOTE 124p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS Adult Education; *Adult Learning; *Cost Effectiveness; Economic Impact; Educational Benefits; Educational Research; Incentives; Information Sources; *Learning Motivation; *Lifelong Learning; Rewards; Student Costs; *Student Educational Objectives; Student Interests
IDENTIFIERS Montana (Livingston)

ABSTRACT

A Livingston, Montana, study on lifelong learning was conducted in two parts. The first part gathered data about the following: (1) what respondents had learned in the previous 12 months; (2) their sources of information and how they rated them; (3) why they initiated learning activities; (4) economic costs and benefits; (5) what they might like to learn in the future; and (6) resources to which they would turn. The second part generated additional information about learning networks and learning providers. Data gathering relied on field research and field theory. A stratified random sample using the local telephone directory generated names of 100 prospective respondents; 60 were interviewed. Findings showed that positive and negative forces, both internal and external, led respondents to engage in learning activities. Respondents identified 302 learning activities with which they had been involved during the past year. The most frequently mentioned resources were themselves, their own books, friends, family, and library books. Respondents were more satisfied with human than nonhuman resources. The most frequently mentioned reason for learning was necessity. The average learner spent approximately $1,000 per year. Respondents did not realize economic benefits in 68.42 percent of their learning activities. The most frequently identified category of learning for the next year was cultural; the most frequently mentioned resource was paid teachers. Learning providers exhibited a wide range of teaching skills at various levels of proficiency. (Appendixes include 10 references and 22 data tables.) (YLB)

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ECONOMIC COSTS AND BENEFITS OF LIFELONG LEARNING IN LIVINGSTON, MONTANA

A STUDY CONDUCTED FOR THE KELLOGG CENTER, MONTANA STATE UNIVERSITY

1988

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LIFELONG LEARNING IN LIVINGSTON, MONTANA

INTRODUCTION

The Livingston study on lifelong learning developed out of field research conducted in Houston, Texas and Port Townsend, Washington. The Houston and Port Townsend research focused on adult learning, and information resources used by learners, and generated questions about community learning networks, the economic costs and benefits of formal and informal learning, motivations for learning, and learning providers. A Kellogg grant offered the researcher an opportunity to conduct a study that would address questions raised in the earlier studies. The Livingston research was conducted in two parts. The first was designed to provide data about what respondents had learned in the previous twelve months, to whom or what they turned for information to facilitate their learning activities, how they rated the resources they used for their learning activities, why they initiated their learning activities, the economic costs and benefits of their learning activities, what they thought they might like to learn in the next twelve months, and to whom or what they would most likely turn to facilitate their learning activities.

The second part designed to generate additional information about learning networks and learning providers. The learning providers were asked the following questions: What skills were they teaching? Why were they teaching? In what kinds of settings

were they teaching? How long had they been teaching? Were they teaching skills they had learned in Livingston? Were they earning any income as a result of what they were teaching? And did they know of any other learning providers in Livingston?

Stratified random sampling using the telephone directory was employed to generate a cross-section of adult learners, and formal, informal, and serendipitous learning patterns. The sample generated one hundred names and addresses from which sixty residents of 48 homes agreed to participate. The data were then analyzed and sifted through Lewin's field theory (1935, 1951) to better understand the nature of adult learning in the context of community.

It must be noted at the outset that the researcher seeks to maintain confidentiality of all respondents. Names will not be used; occupations will.

I. DEFINITION OF TERMS

For the purpose of this study the following definitions were used:

Adult learner - Any person over eighteen who deliberately attempted to learn something new; who invested a minimum of seven hours planning, seeking information, and applying learned information; and perceived the knowledge to be useful to him or her following the time of actual learning (Penland, 1977; Shirk, 1983; Tough, 1971).

Causality - Overpercecption by respondents as they tried to

recall what actually occurred in their lives (Schneider, 1976).

Contiguity - During recall, respondents perceived separate events to have occured together (Schneider, 1976).

Field - The totalilty of coexisting facts in a person's life which are conceived as mutually interdependent (Lewin, 1951).

Field forces - The positive or negative forces that have direction, strength and point of application in the life-space of the individual (Lewin, 1951).

Incidental learning - Serendipitous learning that could be acquired accidentally, and without awareness of the learner (Cropley, 1977; Shirk, 1983).

Invisible learning networks - Informal learning networks that usually were anonymous, existed for varied time-spans, and had learning providers who served as designated or self-appointed information linkages (Shirk, 1985).

Learning - Any or all types of change in cognitive structure, motivation, group belongingness or ideology, or voluntary control of body musculature (Lewin, 1951).

Learning climate - Internal or external field forces impacting the life-space of an individual and which facilitated or impeded one's learning potential.

Learning project - The clearly delineated or evolved purpose toward which the individual directed his or her learning efforts (Shirk, 1983).

Learning providers - Community designated or self-appointed information facilators who held their positions by reason of self-

perceived, community acknowledged, or possessed knowledge and skills that may have been gained from life experiences in formal or informal educational settings.

Life-space - All the conscious or unconscious facts that have impacted an individual at any given moment in time (Lewin 1951).

Marginal man - "A person who stands on the boundary between two groups....He does not belong to either of them, or at least he is not certain about his belongingness" (Lewin, 1951).

Region of freedom - "The determination of the psychological place at which a (person) is and his region of freedom of movement, that is, of the regions that are accessible to him and of those regions that psychologically exist for the (person) but are inaccessible by reason of the social situation or because of the limitations of his own social, physical, and intellectual abilities" (Lewin, 1935).

Social locomotion - A physical or psychological move from one region to another that changes not only the momentary surroundings of a person but more or less the total setting (Lewin, 1951).

Time perspective - The expanding or contracting life-space of an individual that includes distance from future and past events that affect present behavior (Lewin, 1951).

Valence - Critical properties of an individual that attract or repel an individual and determine the direction of behavior (Lewin, 1935).

Visible learning networks - Learning networks that have received institutional authorization to exist to provide

information and skills toward credits, licenses, and formal degrees.

II. METHODOLOGY

Data gathering for this study relied on two methodologies: field research as defined by the social scientists and field theory as defined by Kurt Lewin.

A. Field Research

Field research is not to be confused with Lewin's concept of field theory. Field research refers to research that is conducted in the geographical and social settings in which people live and conduct their daily activities (Burgess, 1982).

Field research was selected for the Houston, Port Townsend and Livingston studies for the following reasons: (1) It permitted the researcher to observe a microcosm of community learning as evidenced and reported by individual respondents. (2) It permitted the researcher to enter a microcosm of the respondents' learning environments as evidenced by their economic and socio-psychological fields. (3) It permitted the researcher to discover the macrocosm of community learning as evidenced by visible and invisible learning networks.

Limitations of field research included: (1) Respondent bias that could include the bias of time, recall, socio-psychological forces impacting the life-space of a respondent at the time of the interview, and the ability of a respondent to interact with the

researcher and the interview instrument. (2) Researcher bias could include perception of and interpretation of a respondent's environment and responses. (3) Sampling bias could include the time of year the research was conducted and use of the telephone directory to generate names. (4) Non-response bias could influence the study if a respondent chose not to or could not participate in the study.

B. Field Theory

Field theory is "probably best characterised as a method: namely, a method of analyzing causal relations and of building scientific constructs....One of the basic statements of psychological field theory can be formulated as follows: Any behavior or any other change in a psychological field depends only upon the psychological field at that time" (Lewin, 1951).

Lewin's concepts in field theory permitted the researcher to sift obtrusive and unobtrusive data through a theory that had some compatability with field research. The primary limitation to connecting field theory with field research was that the study was not designed to measure strict socio-psychological constructs. Nevertheless, those constructs were evidenced to some degree in a specific time span in the lives of the respondents and could encourage further research in lifelong learning.

C. Selection of the Research Site

Due to its close proximity to the Kellogg Center at Montana

State and its population of 6,994 (1980 census), Livingston, Montana was selected as the site for the study. Its poor economic plight was not considered to be disadvantageous to the study; rather, it could provide insight into the economic benefits of lifelong learning to a community.

Livingston is located near the northwest corner of Yellowstone National Park; it is heavily dependent on tourist and recreational traffic during the summer months. Other industries include forestry, ranching, service industries, and a down-sized railroad repair facility. It was the latter that recently had a major economic impact on the community.

Prior to 1986 the main repair shops of the Burlington Northern Railroad were located in Livingston. Burlington Northern was the product of a merger between the Burlington and Northern Pacific Railroads, a merger that raised images of a monoply in the minds of some of the citizens. To consolidate its own services, Burlington Northern officials informed the community of Livingston that its repair shops would be transferred out of state.

In 1986 Burlington Northern gave final notice to its employees and the town that it would close the Livingston shops; those who were eligible could accept a transfer to other system facilities or take early retirement. Those not eligible for either option, or who refused the options, were laid off. They either sought alternative employment, returned to school, or became unemployed. The erosion of community morale continued to echo in 1988.

Not all residents were disheartened by the passing of the

town's major industry. Some business persons and local residents saw this as an opportunity for the community to shake off its image as a company town.

It was into this setting that the researcher came to analyze the nature of lifelong learning in a small community.

D. Selection of Respondents

As with the Houston and Port Townsend research, a stratified random sample using the local telephone directory was employed to generate names of 100 prospective respondents. Letters of transmittal were forwarded to respondents, informing them that they had been selected to participate in a study on lifelong learning in a small town. The letters were followed up by telephone calls at which time interview appointments were scheduled. Forty-eight percent of the prospective respondents agreed to participate in the study.

In eleven cases husbands and wives were interviewed, some at the insistance of the respondents, others at the discretion of the researcher. One father and daughter, on separate days, were interviewed. In one instance the selected family had moved out of town; that family was replaced by the owner of the home who lived at the same address. In another abberation, a neighbor served as a replacement for a family that could be not contacted. A young man who served as a clerk at the researcher's base motel was interviewed and included in the study. Three community residents heard about the study and asked to be included; they were

interviewed, but not included in the final results.

E. Non-response Bias

Fifty-two prospective respondents did not participate in the study. They either were not available during the interview period or refused to participate, claiming to be too elderly, recently widowed, recently retired, too busy, or unwilling to be bothered. Seven potential respondents who refused, or were unavailable to participate in the study, lived at an address that was discovered to be a high rise residence for the elderly. The manager of the complex knew each of the individuals; most were between 70 and 90 years old.

In spite of non-response bias, this method of selecting respondents enabled the researcher to interview a hetrogeneous population that ranged from 18 to 92 years old and included the highly educated and uneducated, employed professionals and unemployed laborers, able-bodied and disabled, high and low income earners, and people from "both sides of the tracks." This broad perspective of types of individuals resulted in a broad perspective of types of learning, including formal, informal, accidental, and incidental learning. It provided the researcher with insights into learning that Bookfield (1986) reported to be lacking in current adult learning research.

F. Snowball Sampling.

As in Port Townsend, snowball sampling (Burgess, 1982) was

used to generate names of community learning providers. Bulletin boards, newspapers, and word of mouth led to the discovery of adults who were assisting others to acquire new skills or knowledge. When a learning provider was identified, that person was asked to identify others in the community who might be assisting others to learn. Not only did this method permit the researcher to discover opportunities for learning in Livingston, it also led to the discovery of influential information linkages who had characteristics somewhat like influential opinion leaders reported in Rogers and Shoemaker (1973).

G. The Interview Instrument

The interview instruments used in the Houston, Port Townsend, and Livingston studies both evolved and remained consistent in response to the analysis of the data; they were "field driven." The Houston study looked at the relevance of libraries to adults and their learning projects; it "drove" the researcher to look at the posssibility of the existence and nature of visible and invisible networks of learning. The Port Townsend study "drove" the researcher to look at the economic impact of learning on both the respondent and community. To maintain consistency in the studies a basic core of questions on adult learning was contained in each instrument.

H. The Interview Technique

Interviews were conducted in person in respondents' homes or

other suitable locations. In order to ensure accuracy and permit the researcher to unobtrusively observe respondents' physical life-space, the interviews were tape recorded. Prior experience with the tape recorder in the Houston study supported this procedure. Livingston respondents did not object to the use of the instrument.

A distinct advantage to taping interviews included the ability of the researcher to transcribe, replay, and analyze the conversations.

As reported in the Houston study, a major drawback to using the tape recorder was the time and effort required to transcribe the interviews. Background noises and indistinct diction contributed to the difficulty of transcribing (Shirk, 1983).

I. Respondent Bias

A critical issue that had been raised in the mind of the researcher in his studies was respondent bias. Was what respondents recalled during the interviews what actually happened? Or had their memories been influenced over time and by what had been transpiring in their immediate life-spaces? By the nature of the interview, the principle of continguity could have occurred. Why did respondents recall certain activities? Could they have excluded others? What had been altered to suit the interviewer and the interview? In which interviews did the causality principle occur? These, and other questions, dogged the researcher throughout the study.

J. Researcher Bias

Objectivity and detachment resulted in some consternation to the researcher in each of his studies; he was frequently reminded of his own potential for bias. At times he trusted his insticnts during the interview process. How accurate were his perceptions? If respondents recalled activities that did not appropriately fit the researcher's definition of learning, he made it his perogative to exclude them from the report. Other times he included activities that clearly did not fit the definition of learning. Learning to tan snake hides in less than seven hours was included in the report. The existential impact of becoming a grandparent was reported and also included.

The researcher also had to approach the undereducated and the highly educated from different perspectives. The perspectives of a surgeon and an unemployed welfare worker were not the same, even for one hundred dollars.

To establish rapport, the researcher tried to include information that shed light on such human drives as the need of the welfare recipient to survive, or the elderly illiterate to question her future, even to the next day, as well as the need of the businessperson to find fulfillment in successful business ventures or personal relationships.

III. DEMOGRAPHIC CHARACTERISTICS OF LEARNERS

A. Age and Sex of Respondents

Sixty respondents participated in the study; 31 were male and

29 were female. Ages of respondents ranged from 18-92, with the average age being 48.43. The average age of males was 48.16; females 48.72 (see Table 1).

As names and addresses were being generated, and interview appointments scheduled for the study, elderly sounding persons answered the phones more frequently than anticipated. If prospective respondents refused, or could could not be contacted, the researcher visited their residences unannounced. Several high rise retirement complexes for the elderly were discovered to exist in Livingston, leading the researcher to conclude that Livingston had a large elderly population.

Anecdotal remarks by the elderly provided the researcher with insights about their perceptions of themselves as learners. Their time perspectives were being influenced by the aging process. "I'm physically not up to it;" "I'm too old to be interested in any such a thing;" "I'm 81 and a little bit infirmed;" "I'm past that stage and I can't concentrate on learning;" "I'm too old, almost 90" were some of the responses. "I'm a widow and have no way to get anyplace," said a 79-year- old potential respondent who had suffered a stroke seven years earlier and had been widowed two years previously.

B. Education of Respondents

Education of respondents ranged from one person who never attended formal classes to a practicing surgeon. Eight adults had attained less than a ninth grade education; five completed between

the ninth and eleventh grades; twenty-one completed high school; thirteen completed one to three years of college; five completed four years of college; and eight completed classwork beyond the bachelor degree.

Four of the respondents informed the researcher they could neither read nor write. Two of the four were, with some difficulty, teaching themselves to read. One of the four devised her own shorthand to compensate for lack of writing skills.

A number of the undereducated reported how they had "fallen through the cracks" of the educational system. An elderly respondent was raised on a ranch too distant from communities with public schools (she reported that her father could neither read nor write, nor did he see the need for his children to go to school). Another elderly woman had epilepsy as a young child; her mother removed her from her second grade classroom; this action resulted in the termination of her formal schooling. A middle-aged man, who reported being socially promoted in public schools, quit his formal schooling before completing the ninth grade; he was illiterate. An older unemployed laborer, who was wearing thick glasses at the time of the interview, reported that poor eyesight resulted in his being removed from school in the fifth grade

C. Marital Status of Respondents

Sixty-one percent of the residences included in the study were occupied by married couples; twelve percent were occupied by single residents; fourteen percent were occupied by widows or widowers;

and twelve percent were occupied by divorced respondents.

D. Occupations of Respondents

Occupations of respondents ranged from a surgeon to the unemployed and included teachers, homemakers, newspaper reporter, street foreman, administrative aide, store owners, clerks, club manager/carpenter, grain elevator operator, students, nurses, paralegal secretary, air traffic controller, truck driver, small engine mechanic, senior companion, real estate broker, cafe owner, bookkeepers, computer programmer, and salesperson for a phone company. Two respondents were on disability retirement; others were retired from the railroad, water department, state legislature, air force, and farming.

IV. LIFELONG LEARNING AND FIELD FORCES

Positive and negative forces impacted the life-space of respondents; internal and external, these forces, led the respondents to actively or passively engage in learning activities. External forces included accidents, illnesses, business ventures, divorces, relocations, new relationships, etc. Internal forces (valences) included factors such as strength of will, response to change, reaction to adversity, sense of curiosity, level of cognitive thinking and ability to solve problems, sense of fatalism, and ability to set and work toward goals. In Lewinian terms, responses to field forces determined whether or not social locomation would occur, boundaries would change, or time

perspective would expand or contract.

The researcher and respondents were restricted by time, place, and the psychological forces interacting in each of their life-spaces during the interview process. Yet in that one hour of interaction between researcher and respondents, life events were recalled and related to the researcher. Several respondents had prepared themselves for the interviews, others agreed to participate even though they did not comprehend the purpose of the study.

The following are extrapolations from the interviews:

A. Negative Forces and Boundary Modification

Boundary modification could be influenced by positive and negative forces in the lives of the respondents. The following are several cases in which respondents reacted to negative forces. In some instances respondents apparently withdrew into themselves. Others had initially resigned themselves to their situations, but were now looking for ways to improve their situations and themselves; others remained marginal; internal dissonance and external circumstances stymied their ability to expand the regions of their life-space.

1. Interview setting: a house trailer cluttered with unpacked moving boxes.

The respondent was a twenty-year-old male who, two months previously, had moved with his father, brother, and future step-

mother from New Jersey to Montana. As a result of the move he left behind a supervisory position in an auto quick-service operation; it was a position that had given him a sense of satisfaction and accomplishment. Now he was unemployed, and from his perspective, with no immediate prospects for work. He was hesitant with his answers, had difficulty comprehending the meaning of learning as it pertained to the interview, and seemed to express a kind of fatalism about his current state of affairs.

In the middle of the interview the respondent's future step-mother came home. Shortly after she arrived she began to dominate the conversation, reminding the respondent that he was learning how to take care of a horse.

From his own perspective, the respondent's most meaningful learning experience in the previous year had been related to his promotion to manager at the auto service company. The new position gave him a sense of accomplishment.

When asked what he would like to learn "next year" he said he was thinking about taking classes in forestry at Montana State University. "You have to like what you're going for," he said.

Time seemingly collapsed for this respondent; he was at a point of regressing rather than advancing. Life did not appear to be open to him; he strained at the thought of going to college. Major changes were taking place in his life; he was having to "find himself" all over again.

2. Interview setting: a modest home on the "other side of

the tracks." The home appeared to be comfortable; the inside of the screen-enclosed front porch was surrounded by hanging and sitting house plants.

The respondent was a 41-year-old divorced female parent who was still recouperating from a several-year-old automobile accident that resulted in her being in a coma for nearly a month. She had been a music major in college, but, one aftereffect of the accident was the loss of some of her motor and memory skills. She was now reteaching herself how to play the piano, taking dancing lessons, learning about house plants, communicating with people, and writing poetry. In addition, she was learning how to operate computers and be a paralegal secretary.

The respondent was both frustrated and challenged as she was relearning piano music that had been familiar to her. She had succeeded sufficiently to play for some public events, but still was not satisfied with her progress.

As for learning how to use computers, she said: "I'm determined." This provided her with an opportunity to become more effective in her vocation as a paralegal secretary.

The respondent was also trying to improve her social skills. Expressed in one form or another by sixteen other respondents, interpersonal learning pointed to the need of respondents to more effectively relate to others. The researcher suspected that if successful, respondents involved in interpersonal learning would psychologically expand their freedom of movement by more effectively relating to their peers, colleagues, and families.

The respondent hoped to publish a short book of poetry in the coming year. She had several poems published, and took time to show several to the researcher. Now she wanted to publish a collection of her own writings.

3. Interview setting: a modest home in one of the newer subdivisions of Livingston. Neighbors had been selected to participate, but were not available.

The respondent was a 40 year-old-male who had been a truck driver; he was now on disability retirement due to a back injury. His wife was an administrative assistant at a local lending institution.

Therapy for his disability included golf lessons and learning cross country skiing on a machine he and his wife had purchased. He was also learning to type on his own; it was a skill he knew he would need if he expected to learn how to operate a computer and enroll in college to pursue a degree in accounting.

The back injury was a debilitating setback for the respondent. With the support of his wife, and his own determination, he was planning a new career. It would take time and would stretch him in ways he would not have pursued had it not been for the injury.

4. Interview setting: an older home on the "other side of the tracks." The kitchen had a "lived in," comfortable atmosphere and was furnished with hand-me-down furnishings. The radio was on throughout the interview, and turned to a local station. A nephew

and his playmate came in and out of the kitchen several times. The basement of the house, now vacant,had been rented out to tennants.

The respondent was a 39-year-old divorced female who was replacing a prospective respondent who had been a tennant in her home; the tennant had recently moved. She had been laid off from her position at a travel agency during the past year. The negative impact of having been laid off had a big impact on the respondent. "This year has been such a disturbance, a wild year," she said. Had she not had apartments to rent in her home, the year would have been even less manageable.

To support herself, the respondent took a position as a waitress, something she had never tried before; after working several months, she decided she was not suited for this kind of employment. Now she was looking into the possibility of opening a "new age" book store in Livingston. She was also interested in developing new relationships with other people, spending some time traveling, taking college courses, and writing children's books.

Her learning activities in the past year included metaphysical spirituality, which was the result of a class on healing and visits with a sister who was teaching courses on the subject of new age spirituality. She was also taking a course in photography because she had been given an inexpensive camera. "It's my love," she said. The existential impact of becoming a grandmother also influenced her life-space.

To what extent was her interest in "new age" sparked by her having been laid off? Would she have considered the possibility

of opening a bookstore had that not happened?

The respondent seemed to have been groping as she looked toward what she might learn in the next year. Her life was still disorganized; the pieces had not come together at the time of the interview.

5. Interview setting: kitchen table of a home located in a lower income trailer park. The family had returned the day before from the funeral of the wife's father. Minutes before the respondent was interviewed, the interview with his wife had been completed in a living room surrounded by four or five large aquariums. The children, who had enthusiastically participated in the wife's interview, had gone outside to play, or remained in the livingroom. During the wife's interview the respondent barely made his presence known. Not saying anything, he merely stood at the doorway for a minute, was introduced, showed a big smile, then retreated into the kitchen.

The respondent was a 36-year-old man who drove trucks for a living. When first approached about the interview he was reluctant to participate; his wife coaxed him into sharing. He said little, except for the following.

The respondent had been involved in two major learning experiences in the past year: his father-in-law's terminal illness, and tropical fish. He and his wife had spent more than $2,000 raising the fish; he was hoping to sell them in the Livingston area.

When the respondent was asked what he would like to learn "next year," he said he wanted to learn to read and write. Although his mother was literate, his father never learned to read or write. He had attended public school and had been socially promoted through the eighth grade. He quit school in the ninth grade. He knew that illiteracy was an obstacle to his self-improvement; it was a learning project he was considering to pursue next year.

When asked to whom he might turn to get help with reading and writing, he mentioned the local public library. He learned about that service when he took his children to get books for themselves. He also wanted to build a log cabin on property he and his wife owned.

"How," the researcher asked, "do you take care of the fish, and follow instructions, if you cannot read?" "I learn how to take care of them by watching them," he said. "If we need help we talk with a pet store owner in Bozeman."

Only when asked about his occupation, did the respondent show any assertiveness. "I'm a truck driver," he emphatically said. He knew he was limited in what he could do. In spite of his limitations he and his wife were pursuing an expensive hobby that required special skills and knowledge.

What role did the wife play in the life of the respondent? Was his mother a subconscious model for his wife? His mother and his wife could read and write; he and his father could not. The wife was the one who appeared to be more gregarious. She agreed

to participate in the interview. She also encouraged the respondent to participate in the study. Was she encouraging him to learn how to read and write? The interview did not provide answers to these questions. It did appear that the respondents supported each other.

6. Interview setting: a restraurant owned and managed by the respondent. The interview, starting at 10:15 A.M., was interrupted several times by customers greeting the respondent.

The respondent was married, 32-years-old, and a native of Livingston. He did not come from a "railroad" family, which, according to him, severely restricted his chances of getting a job with the company after graduating from high school; he never did work for the railroad. Even at the time of the interview he recalled his sense of alienation at not being able to get employment with the railroad.

The respondent moved away from Livingston, managed restraurants, then, seven years ago, returned to open his own cafe. It had been a struggle; now he was experiencing success. The cafe had recently been remodeled, and he was now considering expanding.

In the "last year" he made a concerted effort to be more efficient in business matters; be a better employer, learn to golf; use a VCR camera; become more community oriented; and visit his grandmother in San Antonio, Texas. The trip to San Antonio "filled a void in my life," he said. He was learning more about his roots.

Remembering his sense of alienation in high school, he now

wanted to "make good" with his restraurant. It was a consuming drive. The researcher penned some notes to himself during the interview: "seemed to have the need to be liked, which conflicted with the need to succeed." This was evidenced by people coming in, slapping him on the back, calling out greetings. At the same time, however, he was carefully watching over the operation, giving suggestions, motioning employees to tables, etc. As the interview proceeded he voiced his need to become a better employer. The interview was finally moved to an area of the cafe that had less traffic flow.

This particular respondent could almost be categorized a "marginal man." In one sense he was succeeding in business; that did not suffice, for in another sense his past lack of acceptance seemed to have been strongly etched in his mind.

7. Interview setting: a modest, well-kept, though somewhat meagerly furnished, apartment in a stable, middle-income part of town. Books and magazines were available in magazine racks and underneath a coffee table. The transmittal letter had been opened and was now on the coffee table (for the researcher to see?).

The respondent was a 53-year-old man who had recently been divorced. Other than a short conversation about his former wife, a school teacher in town, little was said about the divorce. A clerk, he was one of the few Burlington Northern employees who had been retained in Livingston.

The respondent's primary thrust throughout the interview was

to emphasize and reemphasize the need to develop a positive attitude toward one's self and toward life in general. He had been pursuing this goal by participating in two extensive correspondence courses: an Earl Nightengale course on self-esteem, and a life study course on the Bible. "We have to get into our dreams," he said, "we have to set goals for ourselves. When there are no risks there are no challenges....On the road to success, one cannot fear being worse off. I must get my eye on the goal." He continued on this theme for more than an hour, resulting in the interview being interrupted and resumed the next day.

Other learning activities pursued by the respondent in the previous year included selling home improvement products, personal investments, and studying about diets and his health. His primary sources of information for these pursuits were at least ten magazine subscriptions.

In the next year the respondent wanted to learn more about selling, possibly purchasing his own franchise. He was aware that Burlington Northern might be transferring him to their Fort Worth offices, and he wanted to keep his mind open regarding his own qualifications and how to better develop them. "I have to be ready, give it 100%, and be willing to learn, if something should break loose," he said. "I'm successful in my own mind, I have a great attitude to face life. I'm ready to break through to something, knowing that I am a winner and feel good about myself."

As the researcher reflected on the interview with the respondent, he was reminded of the "lonely male syndrome," he had

encountered in Port Townsend, Washington. Not familiar with what he was observing, he had a hunch that this was some kind of male phenomena. He presented his findings to a Port Townsend nurse in the county health department; she confirmed the researcher's hunches (Shirk, 1985). The lonely male was approximately forty to sixty years old, middle income, most likely divorced, possibly retired. The lonely male seemed to have been living his life in an emotional vaccuum. He was doing, belonging, striving, yet something was missing. The home environment of the lonely male, no matter how furnished, seemed to have a sterility about it.

This respondent had gone through an "amicable" divorce. He was also one of the few who had survived the traumatic turmoil caused by the sudden departure of the Burlington Northern Railroad. Or had he? He could have had guilt feelings about being a survivor. Now he was attempting to fill the void in his life with "positive thinking." The boundaries in his life had been radically altered, now he was attempting to repair the damage to his own esteem by decisively altering what remained. He was "setting goals," "becoming a winner," entering into a "new relationship with God." He had friends; he regularly met for coffee at the local railroaders' cafe; he was forming a new religious group in town. Yet he appeared to be lonely. He appeared to be, at the moment, a "marginal man."

8. Other respondents experienced their own kinds of trauma. One elderly respondent was "conditioning herself to face life."

As a young person, she had been in beauty contests; time was now passing her by. Other respondents were confronted with illnesses, either within themselves or their families. Several respondents saw family members die. They were confronted with negative forces that, at first, were too abstract or overwhelming to comprehend.

In some instances respondents found themselves having ambivilance toward the forces impacting their life-spaces. Reactions of the respondents could have been in response to the ambivilance, and without any clear sense of direction. For some, these kinds of responses were short-lived, for example, the young mother who experienced divorce. Eventually she entered therapy, took classes at Montana State University, and accepted responsibility of new employment. She was learning how to reimage herself in the light of a broken marriage. Therapy was enabling her to analyze the hurt and ambivilance. She was learning how to mentally and emotionally reposition herself, to actively and positively respond to her life-space. She had not yet "arrived." Her self-esteem was still fragile, but she was receiving help.

An underemployed and undereducated handyman had neither the skills nor resources to effectively make any major moves beyond ambivilance. He wanted full-time employment. He could not find any. His ambivilance led to frustration and fatalistic powerlessness. His "region of freedom of movement" was limited by his "social, physical, or intellectual abilities." With the current economic condition that existed in Livingston, hopes for his finding the kind of employment he thought he could perform were

nil; his future looked dim.

For some respondents, family environments were not conducive to learning. A woman had a desire to learn how to play the family organ. The researcher later discovered that the instrument was located in the husband's combination den and office. It was off limits to her; he did not want her coming into his room and messing things up. He did have a picture of her, in her beauty contest days, prominently displayed on one wall.

An elderly respondent had never attended school. Now she was trying to learn to read using religous books and tapes. "my dad didn't go to school and didn't think we needed to either," she said.

Other respondents were hoping to expand their boundaries. New experiences led them to new relationships, new possibilities. As Lewin expressed it, they were experiencing locomotion, expanding their boundaries. They might not succeed, or they might discover they did not like the new territory; they were going to try to cope with themselves and their situations.

The above are a few examples in which respondents were faced with negative forces in their lives. They could either resign themselves to their situations or try to resolve them; either way the boundaries of their life-spaces were impacted and sometimes made more permanent. For some the struggles were not resolved at the time of the interviews. Others were attempting to initiate plans of action that might allow them to creatively respond to the negative forces. For some, the boundaries were drawing more

tightly around them; life was closing in on them. They most likely would resign themselves to their current state of affairs. It was not what they wanted; it was where they were. A 68-year-old widow exemplified those for whom life seemed to be constricting. When asked if she would like to learn anything in the "next year," replied "If I'm here." Life was not sufficiently open for her to plan for the future.

For boundary modification to have been effected in the respondents' life-spaces, positive external forces had to have been supported with positive internal valences. Negative external forces had to have been offset by stronger internal forces of the will. If, however, the deterrance of such social forces as class, prejudice, politics, etc., were stronger than positive forces or positive valences in the life-space of respondents, boundary modification or social locomotion could have been limited. Hollingshead's Elmtown's youth (1949) witnessed this social phenomena. Likewise, positive external forces could be offset by negative internal valences.

C. Positive forces and Boundary Modification

Positive forces influencing the lives of respondents were also internal and external. External forces included supportive family environments, supportive work environments, opportune moments, luck, new relationships, promotions, and building on past successes. Internal forces included the will to succeed, the will to survive, the will to live for a new day, the will to make the

best of any given situation. The following are several examples of respondents who were actively engaging their life-spaces with positive valences, and in the process, expanding their boundaries.

1. Interview setting: a sparingly provided kitchen in a rented apartment located on the margin of a lower income neighborhood.

The respondent was a 29-year-old, single, self-employed woman who was having her first experience being an entrepreneur. An artist by education, she was in the process of opening a wholesale/retail store to sell products she had made. Her art training stimulated her color creativity; she was now experimenting with fiber reactive dyes, print making, and dye tying. She had not, however, been trained to be a business person.

Opening her own business exposed her to unanticipated conflicts of values. To be successful, she had to learn how to transcend her need to be accepted; she had to learn how to close sales; she had to learn how to be assertive.

She recalled an example of how she was learning to be assertive. She became her own consumer advocate for the repair of her automobile's transmission. This had been the first time she had carried something like this through to her own satisfaction.

An unexpected area in which she had been assertive was when she finally realized she had to do something about drug transactions taking place in her duplex. She finally "got the

nerve" to report the transactions to her landlord, and have people removed.

She was also learning how to be assertive in a relationship. Examining her people and codependence skills was now leading her into a another dimension with her male friend. She was now exploring the possibility of marriage.

In the past year she helped remodel her grandmother's house, including paper hanging. She also designed and built clothing racks for her business. She was discovering that working with dyes was improving her color sense; she was now experimenting with color. She had also developed an interest in the American west and the native Americans.

In the next twelve months the respondent wanted to continue to learn how to separate emotions from business, practice silk screening, learn how to argue better, take a story telling class, and develop a relationship with a "higher power."

The respondent was experiencing inner conflict as she was attempting to become a business person. Expanding her boundaries required the development of social and personal skills that had been unfamiliar to her. She had gained artistic skills that allowed her to critically explore and expand into new areas of thinking. Contemplating marriage was opening new possibilities. Learning to be comfortable with assertiveness was more of a struggle. As far as she was concerned, she had experienced several significant successes with assertiveness; that gave her a sense of satisfaction.

2. Interview setting: a motel office where the respondent was employed as a night clerk.

The respondent was 18-years-old, had recently graduated from high school and was now earning money to attend college.

At one pcint in the interview the respondent was asked what major he would pursue in college. His answer was: "Business. My family was brought up in business, and I guess it is in my bloodline."

A number of respondents, some young, many older, were constrained by their sense of time. The elderly frequently responded to the question about learning with: "I'm too old to learn." Uncertainties were the time constraints confronting younger respondents.

This particular respondent did not exhibit time constraints. When asked about what he would like to learn "next year," he said:

"Actually I would like to learn as much as I can. It really doesn't matter what it is. I hope to go to college this winter; there's just numerous things. I'd like to learn any thing I can. It happens to be that whatever I learn happens. I don't go out and actually look for it, it usually happens. It just comes to you.

"Like the thing of the front desk, there was a job opening and I would make more money so I took it, and because of that I learned the night audit. And I was a maintenance personnel over at Paradise and because of that I learned apprenticeship. Things just happen to fall in place. I don't actually go out, I don't actually look to learn something. I'd like to go to college and because of that I'll be taking classes and learn things."

Other things he learned "last year" included working at a Kentucky Fried Chicken, taking German in high school, shopping for

and buying a stereo, and tuning up his automobile.

Life was open to this respondent. He was not goal oriented. He did have family role models who had provided him with a sense of confidence, a willingness to venture. He was not sure where he was headed, but he was moving ahead with anticipation.

3. Interview setting: in the living room of an older, neatly kept, modest home that was located in a stable, older neighborhood.

The respondent was a 68-year-old female house painter who had recently undergone surgery for replacement of both of her knee caps. She had been widowed for nearly eight years.

Active in senior citizen projects, the Red Cross, and other community activities, the respondent had lighthearted disdain for senior citizens who gave up on life. In the past year she had both knee caps replaced and had now returned to her house painting job. It was her attitude, she related, that allowed her to double the therapy exercizes following each of the operations. Learning about the knees, and having the operations performed had been her major learning activity in the past year. The respondent's volunteering with the Red Cross and senior citizens center provided her with opportunities to be around and observe people; this had become one of her ongoing interests. She liked people.

When asked what she would like to learn next year, the respondent laughingly said: "I'd like to write a book about my experiences working with people." She also had a desire to learn how to quilt.

The positive forces in this respondent's life had been her willingness to face life head-on. Disabilities did not deter her; rather, they became the challenges that made her more determined to contribute to life around her.

4. Interview setting: a 7 A.M. breakfast appointment at a local restraurant that had been set at the respondent's home the previous evening. The home was located in one of the newer and more expensive Livingston subdivisions.

The respondent was a 50-year-old, married, farm and ranch real estate broker, who had recently suffered heavy losses in the financial market. He was slowly recovering. His occupation required constant awareness of legalities and changes in the market place. Learning, he said, was a part of his life; it was something he probably got from his parents who had both been school teachers.

In the past year he learned how to use an office computer, and was now, with the help of his wife, putting his files into a national data base. Computerizing his data bank was a major effort that would streamline his service.

The respondent was in a line of work that required staying abreast of the latest developments in the field. In addition to reading current periodicals, journals, and attending conferences and seminars, he relied heavily on video and cassette tapes to support his information needs. His work required long hours on the road; listening to the cassette tapes was his way of "absorbing information" and keeping up with new regulations while traveling.

When not on the road, he would use his free time to view video tapes that were available in the office library.

"Next year" he wanted to learn how to relax, golf, remember names, and keep up with the changes in his business. Not remembering names was embarrassing; it was something he had to do if he was going to increase his effectiveness as a real estate broker.

The respondent experienced major financial losses in the recent past. Those losses did not come without pain; he realized, however, that loss was part of the territory for anybody who wanted to be in real estate. He knew he had limitations; he was also seeking to improve himself. He remembered the good times in the business; they would come again.
He had to hold the course.

5. Interview setting: the kitchen of a modest middle income home in a newer subdivision of Livingston. The father had been disabled and medically retired from the Burlington Northern Railroad.

The respondent was 19-years-old, had graduated from high school one year ago, and was now working as a sales clerk in a western wear store. When asked what she had learned in the past year, she opened with, "I've made decisions that are going to affect my future--investing, things like that." Working with the public and for her employer opened up a whole new career to her. She said "I love working with the public, I thrive on it; there is

something new every day. The experiences I've had, the places I've gone...a lot of new opportunities opened to me. This is the year I came out of my shell; a year ago I never suspected I'd be doing the things I'm now doing. I used to be pretty quiet, on the shy side; now I'm doing a lot of things. As a result of this I can go into a lot of different fields. I've grown up in a year."

Now the respondent was thinking about taking classes in fashion and merchandizing at the university. She also worked part-time in a local art gallery.

The respondent had been treated as an adult by her employer. One year ago she had been a high school student; now she was a young businessperson. She was asked by her employer to help make decisions about purchases, had been sent on buying trips, met with sales representatives, and, at times was entrusted with the day-to-day operation of the store. "It's nice that she gave me that responsibility; we work as a team. My employer also helped me set new goals for myself; she's good at that," she said.

When asked what she had learned the the past year, she listed the following vocational skills: management, marketing, working with the public, working with sales representatives, and learning about hats and fashions. In her personal life she was learning about needlework, the arts, personal investments, setting new goals for herself, developing a more mature relationship with her parents, and learning more about Livingston.

The respondent's family life was a significant area of learning: "my relationship with my parents has changed

tremendously over the past two years. I have made some positive changes in my life." The researcher asked: "Who do you think changed, you or your parents?" "Oh me, I've matured," she said.

Learning about Livingston included personal observations about the changing economic climate and the loss of the railroad. With optimism she said, "but the town is coming back; in two or three years the town will be back on its feet." Part of her learning about Livingston included attending a two-day seminar about Livingston's future.

When asked what she would like to learn "next year" she talked about the need to develop additional management skills related to the business. In her personal life she had been influenced by the art gallery and now wanted to develop her own artistic skills. She also wanted to take voice lessons, learn more about herself and her capabilities, and learn how to more effectively handle her finances.

Although the respondent knew she had made giant strides in the past year, she was not taking those strides for granted. She knew her employer was her mentor and played a major role in her development. The positive impact of employment on her life-space allowed her to expand her boundaries. The self-confidence she gained allowed her to critically analyze herself, which in turn led to an improved relationship with her parents. She matured in one year and was anticipating the future; her time perspective was expanding, not contracting.

6. Interview setting: the kitchen of a sparsely furnished two-story home that was also the residence for a recently divorced daughter. A second home, this was where the husband and wife conducted their computerized accounting business.

The respondent was 50-years-old, married, a self-taught computer programmer, and was now writing accounting programs for area loggers. His wife ran the programs and kept accounts for clients. The business had the trappings of a "Mom and Pop operated cottage industry."

When first asked about his formal education, the respondent said he had been a high school drop-out. "No you're not," his wife answered, "you got your GED after you got out of the navy." When asked how he got into computer programming, he told how, as a child, he would tear apart and repair radios. After quitting school, he enlisted in the navy and attended electronics technician school. Following his discharge he was employed by the railroad as an electrician, pursuing this line of work until an on-the-job back injury forced him to take disability retirement.

It was during the recovery from his back injury that the respondent decided to buy a computer. "I was the first kid on the block to get one," he said. "I just liked the thought processes that it took. I just waded through it. I bought computer magazines, and If I ran up against something I couldn't understand, like linear regression, I went to computer stores to get assistance. You have to be very specific regarding goals." In addition to custom programming, the respondent purchased a

software system, was using cassette tapes to improve his guitar playing, and was taking a correspondence course in stock market analysis. He learned about the correspondence course from a mailing that came to his home.

"Next year" he was hoping to learn about bookkeeping and accounting, continue with guitar lessons, take up woodworking as a craft, and study history and philosophy.

This respondent lived in a home in which books were frequently exchanged between his wife and her brother who lived in the mid-west. A "learning environment" simply pervaded the home. In spite of his "educational gaps," learning was a way of life for him. He was constantly pushing back boundaries. The unknown was not to be feared, nor did he appear to be driven to achieve. The unknown was there to be explored; exploring was second nature to him. That exploration was now moving him beyond the familiar electronic boundaries into the abstract field of philosophical thinking.

7. The preceeding cases have provided insight into growth and learning. Most of the respondents were not highly educated, they were motivated. Inner drive, curiosity, family influence, and the will to succeed were forces that enabled respondents to expand their boundaries.

Growth did not always come without struggle and ambivilence; the respondents accepted the challenge to grow. They did not always have an interest in people; they did have interests. They did not always feel comfortable making decisions; they were not

afraid to make decisions. They did not always set goals for themselves; some did. If they were to succeed they knew they had to be open and accept opportunities that came their way. They were risk takers. In spite of its obstacles, life was open to them.

V. CHARACTERISTICS OF LEARNERS "LAST YEAR"

Sixty respondents identified 302 learning activities that they had been involved with during the "past year," an average of 5.03 activities per person. What did they learn? To whom did they turn for information? Why did they get involved in what they had been learning? Did they encounter economic costs or benefits as a result of what they had been learning? These questions will be answered in this section.

A. Respondents and Learning "Last Year"

The 302 learning activities were divided into nine categories: vocational, domestic, interpersonal, religious, medical, recreational, cultural, political, and other (Shirk, 1983). Frequency of learning was ranked as follows: first, vocational; second, domestic; third, cultural; fourth, recreational; fifth, medical; sixth, other; seventh, interpersonal; eighth, religious; and ninth, political (see Table 2).

1. Vocational learning.

Rapid changes in information transfer, technology, economics, health care, ventures into entrepreneurship, and mobility in the

work place made learning on-the-job a necessity. Ranked highest, 30.46 percent of the activities were categorized as vocational learning. Activities in this category included learning about the welfare system, hand surgery, real estate, CAT scanners, veterinarian assistant, color sense, marketing, cardiac monitors, paralegal training, computers, typing, banking, carpentry, cabinet making, commercial notes, weather observation, driving a skidder, saw mill quality control, small engine repair, catering, bookkeeping, accounting, automatic dialers, motel night audit, plumbing, IRA and trauma seminars, loan documentation, newspaper writing (see Table 3).

2. Domestic learning

Domestic learning included activities related to, and around, the home. Mostly do-it-yourself projects, these activities were intimately related to the respondents' life-spaces; they provided the respondents a way to save money, experience creativity, make necessary repairs, fill voids in their lives, and were frequently completed in the privacy of their homes. Ranked second highest, 15.89 percent of the activities were included in this category. Activities included learning about family finances, drying fruit, ferrets, canary, herbs, diets, personal computer, investing, setting new goals, auto tune-ups, upholstering, plants, personal survival, landscaping, learning about ancestors, raising chickens, recipes, etc. (see Table 3).

3. Interpersonal learning

Interpersonal learning included activities in which concerted efforts had been made to more effectively relate to other persons who were either intimately related to the respondent's life-space, i.e., family and friends; or with whom the respondent was associated in the work place; or people whom the respondent wanted to influence, or include in his or her life-space. Ranked seventh, 6.29 percent of the learning activities were identified as interpersonal. Learning activities included body language, co-dependence skills, assertiveness, examining marriage, relationship with parents, working with the public, communicating with people, parenting, social skills, grandparenting, etc. (see Table 3).

4. Religious learning

Ranked eighth, 5.30 percent of the learning activities were identified as religious. These activities included Judaism, service on pastoral council, bible reading, teaching adult church school, organizing state religious convention, selecting a church to attend, metaphysical spirituality, God's kingdom, Native American religions, the sacraments, rite of Christian initiation, etc. (see Table 3).

5. Medical learning

Ranked fifth, 7.28 percent of the activities were categorized as medical learning. These learning actities included AIDS, degenerating discs, emphysema, depression, hip replacements, knee surgery, heart attack, cancer, coping with death, diabetes,

counseling, eye disease, etc. (see Table 3).

6. Recreational learning

Being in a geographical region that had extensive opportunities for summer and winter sports, the researcher was not surprised by how frequently recreational learning was mentioned. Ranked fourth, 12.91 percent of the respondents referred to some kind of recreational learning that included racquetball, tying flies, oragami, tanning snake hides, golf, cabinet making, needlework, stamp collecting, braiding rugs, photography, riding horses, woodworking, bird hunting, raising tropical fish, video camera, quilting, wheat weaving, pine needle basketry, italic hand writing, decorating sweatshirts, ceramics, wilderness survival, crossword puzzles.

The respondent who referred to crossword puzzles had recently been widowed; she found therapy in buying and learning how to complete the puzzles, something that had not interested her in the past (see Table 3).

7. Cultural learning

The researcher was surprised by how frequently respondents referred to learning activities that could be categorized as cultural. Ranked third highest, 13.58 percent of the activities were placed in this category. Learning activities included mythology, ancient Egypt, the American west, the holocaust, travel to Greece, Native Americans, Flannery O'Connor, French language,

creative writing, watercolors, having a foreign exchange student in the home, pottery classes, sign language, dance lessons, piano lessons, poetry, sculpture sitting, directing a play, learning new words, learning to read, German language, guitar, percussion instruments, etc. (see Table 3).

8. Political learning

The least frequently mentioned, 1.32 percent of the learning activities were identified as political. The activities included watching "Crossfire" on television, observing apathy of people toward politics, applying for government grants, and a city manager form of government (see Table 3).

9. Other learning

The category "other" included 6.95 percent of the learning activities that the researcher found difficult placing in distinct categories. These activities included positive thinking seminars sponsored by the city of Livingston, the imposter syndrome, jokebook humor, people's court, tutoring college student, moral issue about drugs, labor negotiations seminar, school finance, school law, demolition derby. (see Table 3).

As can be seen from the above, learning from the perspective of the respondents covered a broad spectrum. In more than one instance, learning was only recognized after the fact. Respondents frequently confused learning with schooling. Only as the researcher probed, was learning viewed from a different

perspective. Respondents were accumulating skills, expanding reservoirs of knowledge within themselves. Some of the learning was practical, day-to-day, "common sense" knowledge; some of the learning was theoretical, gained in the classroom; some of the learning was urgent, life-saving; some of the learning provided an escape from day-to-day routines; some of the learning provided a means to personal income, and was a source of pay increases or promotions.

B. Information Seeking and Learning

To whom did respondents turn for information to support their learning activities? A total of 15 resources (Shirk, 1983) were listed from which they could select as many as were appropriate for each activity. For their 302 learning activities, respondents indicated they had referred to an average of 3.10 information resources for each activitity. After they had listed the resources they had used, respondents were then asked to rate each resource on a scale from 1 - 5, with 1 being no satisfaction, and 5 being complete satisfaction (see table 4).

1. Rank order of learning resources

The most frequently mentioned resource was themselves followed by other resources, their own books, friends, family, library books, business persons, teachers, the media, employers, informal groups, books from friends, physicians, the clergy, and librarians (see table 4).

2. Rating of learning resources

When asked to rate the resources respondents used for learning, librarians were ranked first, followed by physicians, teachers, the clergy, family, other, their own books, business persons, friends, themselves, books from friends, informal groups, employers, library books, and the media (see table 4).

3. Analysis of learning resources

As in the researcher's previous studies (Shirk, 83; Shirk 85), respondents were more satisfied with human resources than with non-human resources, including books and the media. Books were frequently used as resources for learning; they were less frequently perceived as appropriate resources for learning. This was particularly true for library books.

As in the researcher's previous studies, resources for learning receiving the highest ratings were professionals. It was not always the professionals to whom respondents first turned for information; friends and family were more likely to be considered. As Rogers and Shoemaker (1971) noted, the diffusion process was effected through human resources who were compatible with the respondents. If compatibility and accessibility had existed between respondents and professionals, i.e., if professionals had been familiar figures within the boundaries of the respondents, they more likely would have been used in the information seeking process. If compatibility did not exist, professionals would less

likely be used.

Compatible intimates who had access to respondents' life-spaces and had become established within the respondents' boundaries, frequently included colleagues, friends and families. If intimates referred respondents to professionals, those professionals would more likely have been used in the information seeking process. Family members, however, were not necessarily compatible intimates: spouse, sibling, and extended family rivalry could create negative forces that could have been blocks to intimacy and blocks to learning.

Circumstances also determined the frame of mind respondents would have toward their information resources. A middle-aged woman recently had both of her hips replaced reported her need to simply trust her doctor and have complete confidence in him. A young mother used her past experience as a physician's receptionist to judge the quality of her pediatrician. She spoke highly of him after he had found a skeletal deformity in her three-year-old daughter. She withheld praise, however, until she received a second opinion from her former employer who lived in Tennessee. Satisfied with the local physician's diagnosis, she was now convinced he was one of the better professionals in the area.

In the information seeking process respondents also turned to non-professional learning providers who had acquired informal titles that identified their areas of actual or self-proclaimed expertize. One respondent, who had been learning about canaries, repeatedly referred to "the bird lady." Other respondents

referred to store owners, employers, or informal groups for learning information. Opinion leaders/gatekeepers, they either were learning providers, or could direct respondents to learning providers.

The use of technical resources for learning had significantly evolved from the time the Houston and Port Townsend studies were conducted. The use of home and office computers and video cassette recorders were evidences of advancements in educational technology. A nurse purchased a new sewing machine that included an eight hour instruction video. A banker used video cassettes to support his interest in tieing flies and golf. A woman participated in a study of the sacraments at a local church; the lessons were supplemented with video tapes. A real estate broker frequently watched video tapes related to his business. Regularly watching the Discovery Channel was reported by five different respondents; travel and National Geographic programs were particularly favored.

If respondents aspired to expand the boundaries of their life-spaces through learning, they frequently sought out those resources who they perceived could support their desires for acceptance and mobility. For some, this included accepting memberships in community organizations, associating with business groups, and pursuing such social sports as golf.

4. The adult learner as learning provider

During the course of the Port Townsend study the researcher

discovered that not only were some learners actively learning, they were also actively involved in helping others learn. They turned to the invisible networks of learning to meet their information needs; at times they were actors in the networks (Shirk, 1985). The situation did not differ in Livingston. Learners were both benefitted from, and were actors in the visible and invisible learning networks.

Although not reported in the study in that the respondent was recognized as an expert, a grain elevator operater participated in an archery refresher course and was now assisting hunters who wanted to get their state licenses. A retired high school math teacher tutored a college student and before that tutored a student who was preparing to take a military entrance examination. That same retired teacher accepted an assignment in a church school class. He agreed to do it because he wanted to add a depth to the program that, as far as he was concerned, was lacking at the time. A carpenter was using the buddy system to both learn and assist others to learn the trade. A retired air force officer, an amatuer in the acting profession, was tutoring community residents in the art he was studying. Bankers, doctors, real estate people, homemakers, were part of the invisible and visible learning networks. They were learners, they were also learning providers.

C. Why Respondents Learned

Respondents were given five choices from which they could identify their reasons for learning: "necessity," "I was curious,"

"by chance," "through an acquaintance," and "other" (Shirk, 1983). The most frequently mentioned was "necessity," followed by "I was curious," "other," "through an acquaintance," and "by chance" (see table 5).

In attempting to analyze reasons given for learning, the researcher has been acutely aware that responses were jaded by time and recall. What really were the trigger events in the life-spaces of respondents that would result in their learning something new? Was it, as some reported, a spur of the moment decision? Could there not have been, in some instances, a latent desire that found the opportune moment for expression? Were circumstances so demanding that some kind of response had to be made?

A 60-year-old respondent reported about an experience in the past year through which he had learned how to be patient. He was working in a hardware store, when an elderly gentleman came in for a replacement part for a small engine. Could the respondent supply him with one? "I need the part number," he snapped. The gentleman could not provide a number at that moment. "Well go home and find out what the number is. Read your instruction manual," he said. The gentleman left, intimidated. Shortly after the gentleman left, the respondent started thinking to himself: "What if someone treats me like that when I'm older, how will I feel?" In that snap momement, he said, "I learned patience." When the gentleman came back I readily helped him."

The respondent then went on to say: "Before I retired, I was in a business in which I had to make instant decisions. I lived

and worked by instinct. If the light turned green, I'd be on the horn to the car in front of me. It was instinct. But, the incident with this gentleman was so complete that I couldn't believe myself. Just that quick, I got patience. I even told people at church about it. I couldn't believe it myself. Now if the light turns green, I don't even lay on the horn for the car in front of me."

Was this reported transformation a sudden event? Had this been the first time the respondent experienced the need to be patient? Had there been other events in his life-space that day that were pointing to the need to be patient? Could this need to be patient not have been a latent desire "whose time had come?"

Additional anecdotal remarks by respondents about reasons for learning included, "it was the mighty urge," (a retired air force officer who had produced a play); "I just up and did it," (a computer programmer talking about playing the guitar); "it was very satisfying," (a computer programmer writing his own computer programs); "it gave me enjoyment," (a bank administrator who was learning to play racquetball); "it was for my sanity," (because of degenerated discs in his back, a medically disabled railroad employee tried to divert his attention by learning how to tie flies); "I was selected to take the position," (disabled railroad employee who accepted a leadership position in his church); "my wife talked me into it," (a city employee who participated in community positive thinking seminars); "I did it for my grandson," (an office administrator who was learning about oragami); "it was

something to do," (a widow who, recovery from surgery following hip replacements, was refinishing furniture); "it stirs up my interests and I can talk to my neighbors about it," (a retired city employee who, by watching Crossfire, sharpened his interest in politics); "it was something I wanted to do," (a retired high school teacher who had organized a state religious convention); "I learned about it through the newspaper," (a homemaker who had accepted a foreign exchange student into her home for a year); "it was a fluke, I just didn't know there was treatment," (an artist who, as a result of opening her own business, saw the need to deal with codependence and improve her people skills); "my background required that I attend," (a homemaker who, recently having had served on the school board, attended labor negotiation, school law, and school finance seminars); "I did it for experience," (a carpenter who was also managing a club); "it was for inner-life change," (a railroad clerk who was pursuing a life study course on the Bible); "I thought it was important that I do it," (a grain elevator operator who attended a seminar on environmental regulations); "I had an interest in it, I'm planning to attend vet school," (a veteranarian assistant who was studying microbiology at a nearby university); "I'm trying to learn by myself," (an elderly illiterate who, to learn more about the world around her, watched National Geographic specials); "thoughts come into my mind and I write them down," (a legal paraprofessional who had an interest in poetry; "I have to do a lot of walking for exercize and rehabilitation," (a disabled trucker who, for physical therapy, was taking golf lessons and

learning how to use a cross country ski machine); "I was interviewed and got the job," (a banking administrator who was advanced to the real estate escrow department); "I wanted to do it," (a retired farmer who conducted his first travel tour guide for senior citizens from a senior citizens center); "its an awakening within yourself which strikes constantly at various times," (an unemployed homemaker who was studying metaphysical spirituality); "I got hooked on it," (an umemployed homemaker who, as a result of receiving a camera from a sister, started taking photography classes); "it gave me a sense of satisfaction as people saw what I was doing on my own," (a nurse who recently took classes in furniture upholstery); "I knew I had a problem and had to do something about it," (a retired state representative who discovered he had diabetes); "I finally just took a risk, decided to let it go," (a business person who, after having lived in Montana four years, decided to sell his Minnesota home); "a doctor encouraged me try to learn to read," (elderly illiterate who had spent years on the rodeo circuit and was now learning to read); "My brother trades books with me; I also buy my books at B. Dalton," (an accountant who is reading books about Henry the Eighth and English history).

What really triggered the learning that took place in the life of the homemaker who accepted a foreign student in her home? The couple and their young child had recently moved to Livingston and shortly afterward discovered their daughter had a severe hip problem. They were also wanting to get more involved in a local

church. Did the move, the medical problem stir them to make the decision to take an unknown into their home for a year? Had either of them been foreign exchange students? Was the decision on the spur-of-the-moment? These questions were not asked, they could have been raised.

D. Settings for Learning

Respondents were given the opportunity to identify settings in which learning had occurred. Learning with another person was most frequently mentioned, followed by learning alone, learning in informal groups, learning in formal classrooms, and learning in such settings as networks and nature (see table 6).

For some respondents like the computer programmer, problem solving was a personal challenge to be carried out alone; only when confronted with totally unfamiliar ideas were experts consulted. Others found leadership in the formal classroom most stimulating; it provided both the expert and give and take between colleagues and the expert. Some found the formal classroom too confining; the informal group provided a greater opportunity for interchange of ideas. The "buddy system" of learning was particularly inviting those working in the skilled trades, something that has now been confirmed in all three studies (Shirk, 83; Shirk, 85).

Although learning with another person was the most frequently mentioned setting for learning, most respondents learned in a variety of settings, sometimes even for the same learning activity. They may have felt most comfortable in a particular setting; they

adapted themselves to their environments.

Learning with another person could have been most frequently mentioned setting in that it could provide the respondent with an opportunity to maintain stability in his or her life-space by linking up with the friendly-and-known-other-person. At the same time, however, selecting this kind of setting could also provide the respondent with the opportunity withdraw and contract rather than expend his or her life-space; internal and external forces could influence the decision. The one-on-one setting could also provide the respondent with an opportunity to expand his or her life-space by turning to the-influential-other for information, "picking brains," so to speak. One's time perspective could also influence to whom the respondent would turn at a given moment in time. It could have been the only setting available in a work situation. It could also be the dominant or most comfortable setting to the respondent. The computer programmer is a case in point; a problem solver, he relished figuring things out for himself. As a last resort he would turn to an expert for advice.

Whether the formal classroom, informal group, with another person, or alone, one could perhaps find a specific motivation(s) for selecting a particular setting. Whether or not they were the most effective settings, the data do indicate that respondents were more likely to conduct their learning with another person or alone.

E. The Economics Costs and Benefits of Lifelong Learning

While conducting his study in Port Townsend, Washington, the researcher was made aware of economic transactions that took place during some of the learning activities. If, for example, a person spent money on a skein of wool while trying to learn how to macrame, an economic transaction was taking place (Shirk, 1985).

To try to account for economic costs and benefits of learning in the Livingston study, two questions were added. (1) "Did you incur any financial expenses while conducting your learning projects in the past twelve months?" (2) Did you incur any financial gains while conducting your learning projects in the past twelve months?"

A question the researcher should have asked himself when generating questions on the economics of learning was: "What constituted money spent for learning?" Should the expense incurred have been prorated to contain only the amount that directly contributed to learning, or should the entire project have been included as a monetary outlay, even if learning was only recognized after the fact? Those questions were not asked, therefore, learning expenses reported reflect the total costs of the projects.

Respondents were given five categories to choose from to indicate how much they had spent on learning during the "past year," they were: (1) none, (2) $1.00 - 50.00, (3) $51.00 - 100.00, (4) $101.00 - 150.00, and (5) $151 plus. Were the researcher to repeat the study, he would have made this an open-ended question.

An analysis of economic costs and benefits of learning by sex and by age of respondents younger respondents, male and female, were more likely to incur costs and economically benefit from their learning activities. The data also indicate that males and adults under 60 were more likely than females and adults over 60 to incur higher costs and economically benefits from their learning activities (see tables 7, 8). Comparisons of education and sex of respondents did not provide distinct lines between respondents (see Table 9).

1. Economic costs of learning

Respondents indicated approximately thirty-six percent of their learning activities were conducted without cost; twenty-four percent of their activities cost between $1.00 and $50.00; eight percent cost between $51.00 and $100.00; three percent cost between $101.00 and $150.00; and twenty-seven percent cost more than $151.00 (see Table 10).

Why were respondents willing to incur expenses related to their learning? Analysis of the interviews revealed ten reasons or ways in which respondents incurred expenses while conducting their learning activities. The ten reasons will be followed by examples of learning costs.

a. Some respondents undertook projects, not to learn, but to accomplish specific tasks. After the fact they were surprised at what they had learned. One couple built an addition to their home

that cost approximately $8,000. They drew their own plans; purchased tools, supplies, and books; borrowed books from the public library; and went to other people for advice. The interview was conducted in the new addition; it was obvious the respondents were pleased with what they had accomplished. An elderly woman purchased a pair of ferrets not to learn about ferrets, but for companionship; veterinary costs, purchasing a book, and related costs resulted in expenses of over $151.00 for the year.

b. Respondents purchased items for the purpose of learning how to use them. A woman spent $2,000 for a computer and was now learning how to use it. She could have taken computer classes for less than $2,000, but, her family needed a computer, so she was learning on the one they had purchased. Another respondent purchased a video camera for more than $1,500 and was learning how to use it.

c. Whether it was the most effective method or not, some respondents spent money on their activities to have something to do, or to pursue an interest. Some of these activities included fly tieing, furniture refinishing, computer programming, raising tropical fish, etc. When confronted with problems they could not solve, they either turned to friends who knew something about what they were trying to learn, or to experts for advice.

d. Some respondents paid for informal classes at local shops,

or took lessons from people who exhibited the skills they were interested in. These lessons included golfing, photography, art, pine needle basketry, and knitting.

e. Respondents also reported using video tapes to help them learn. Video tapes were available from churches, places of employment, and on occasion, respondents rented tapes for the purpose of learning.

f. Some respondents reported that the "Discovery Channel" was a resource for learning about foreign countries, mythology. One respondent taped every segment of a series on Campbell's mythology.

g. Respondents enrolled in formal-for-credit classes, some working toward terminal degrees, others to acquire specific skills, and some for the challenge they found in university settings.

h. Respondents sought out financial advisors to assist them with their investments.

i. Businesses frequently provided opportunities for learning that did not require expenses on the part of the respondents. These opportunities included on-the-job training, seminars, business trips, etc. Respondents reported incurring expenses for formal classes, materials, travel, and incidentals related to their employment.

j. Business persons invested in their businesses by expanding their inventories to see what would sell; pursued formal and informal courses; purchased equipment to improve their services; studied marketing techniques; and traveled to seminars, workshops, or buying trips.

k. Representative activities for which respondents did not incur expenses included learning about the state welfare system, newspaper computer system, reporter writing, logging skidders, wholesale merchandizing, hemodynamic equipment, drying fruit, conditioning self to face life, new automobiles, survival, yard care, real estate, creative writing, poetry, calligraphy (see Table 3).

Representative activities for which respondents incurred expenses of between $1.00 and 50.00 included learning about Montana tourism, building a clothing rack, paralegal training, computers, marketing, mythology, Native Americans, watercolors, learning about Livingston, acting in a play, percussion instruments, family investments and budgeting, a pet canary, remodeling grandparent's house, emotions anonymous, oragami, tanning snake hides, stamp collecting, basket weaving, italic hand writing, ceramics chaulking, crossword puzzles, mother's cancer, diabetes, husbands inhaler, imposter syndrome, wild flowers, body language, and God's kingdom (see Table 3).

Representative learning activities for which respondents

incurred expenses of between $51.00 and 100.00 included: cabinet making, installment lending, ineffectiveness of advertizing, dance lessons, Henry VIII and English history, setting new goals, upholstering, auto tune-up, golf lessons, needlework, woodworking, decorating sweatshirts, daughter's depression, dieting, humor in the workplace, communicating with people, life study course on the Bible, and Native American religions (see Table 3).

Representative learning activities for which respondents incurred expenses of between $101.00 and 150.00 included: color sense, directing a play, Native American beadwork, dessert recipes, canning meat, raising chickens, tieing flies, and quilting (see Table 3).

Representative learning activities for which respondents incurred expenses of more than $150.00 included: medical seminars and meetings; fiber reactive dyes; air traffic control classes; college tuition and fees; business expansion and remodeling; home rennovation; IBM word processing, foreign travel; language classes; foreign exchange student in home; piano lessons; ferrets; recreational activities including cabinet making, golf, raquetball, and fishing; new equipment including home computers, video camera, 35mm camera, and sewing machine; stock market analysis; medical problems including degenerating discs, heart attack, and terminal illnesses; outdoor musical concert; parenting; and Judaism (see Table 3).

After analyzing the cost of learning the researcher has concluded that the average learner spent approximately $1,000.00

a year for their learning activities. Some respondents did not incur any expenses, one respondent incurred expenses of over $8,000 for one activity (see Table 3).

2. Benefit analysis of learning

As respondents were asked to estimate the costs of their learning activities in the "past year," they were also asked to estimate the economic benefits they had experienced in that same time period. "Benefit" referred to any financial income that had been realized as a result of what respondents had learned. As the interviews proceeded, the researcher saw the need to redefine "benefit." Rather than alter the questionnaire, anecdotal remarks about non-monetary benefits were recorded.

To determine respondents' perceptions as to the economic benefits of their learning "last year," they selected their responses from the following categories: (1) No benefits experienced, (2) $1.00 and 50.00 benefit, (3) $51.00 and 100.00 benefit, (4) $101.00 and 150.00 benefit, and (5) $151.00 benefit or more.

Respondents indicated they did not realize economic benefits in 68.42 percent of their learning activities; earned between $1.00 and $50.00 in 3.95 percent of their activities; earned between $51.00 and $100.00 in 1.97 percent of their activities; earned between $101.00 and $150.00 in 1.64 percent of their activities; and earned more than $151.00 in 23.17 percent of their activities (see Table 11).

Ways in which respondents realized economic benefits from their learning activities included: pay raises, promotions, speaking engagements, classroom teaching, selling what they had made, tutoring, business ventures, group performances, and medical services.

Activities for which respondents did not incur economic benefits in the "past year" included learning about Montana tourism, building a clothing rack, environmental regulations, home computer, mythology, Native Americans, writing class, Henry VIII and English history, drying fruit, pet bird, new family role, tanning snake hides, tying flies, golfing, AIDS, and school finance seminar (see Table 3).

Activities for which respondents incurred economic benefits of between $1.00 and 50.00 included learning about payroll bookkeeping, creative writing, percussion instruments, planting a garden, calligraphy, tutoring, interpersonal skills, learning about animals, and selling sweatshirts (see Table 3).

Activities for which respondents incurred economic benefits of between $51.00 and 100.00 included learning about marketing, how to handle animals, and becoming more community oriented.

Activities for which respondents incurred economic benefits of between $101.00 and 150.00 included learning about newspaper computer system, reporter writing skills, learning from sales representatives, small engine repair, and knee surgery (see Table 3).

Learning activities for which respondents incurred economic

benefits of more than $151.00 included: fiber reactive dyes, hand surgery seminar, carpentry and house building, hats and fashions, microbiology, sales training, farm and ranch real estate, IBM word processing, ancient Egypt, the American West, the Holocaust, piano lessons, family finances, investing, learning to survive, senior citizen tour guide, trees, co-dependence and people skills, assertiveness, and lecturing about Judaism (see Table 3).

In only the "vocational" type of learning did the average respondent experience a net economic gain in his or her learning activities. In every other category the average respondent incurred a net deficit.

The highest average deficit was experienced in the area of recreational learning. This phenomena, though not surprising, led the researcher to look for respondents' anecdotal remarks that would support their willingness to experience economic costs in the pursuit of their learning activities. They found diversion from more pressing matters, relaxation, enjoyment, and opportunities to meet other people through these new learning experiences (see Table 12).

3. Alternative benefits to learning

Respondents had been willing to incur expenses for what they had been learning because it provided them with a sense of satisfaction for having accomplished something new, satisfied their curiosities, provided them with skills they could use at a later time, gave them peer recognition, and provided them with potential

sources of income.

Several of the specific non-economic gains included an elderly woman reporting that she bartered paintings for other goods. A young housewife was learning to make crafts so that she could give them as Christmas gifts; she got the idea from her mother-in-law who always gave homemade crafts as presents. A nurse found satisfaction in showing to others the furniture she had recently upholstered. A young man learned how to tuneup his car; now it was meaningful for him to help his friends. Several of the disabled found therapy in their learning activities. Particularly in the recreational activities, learning new skills provided respondents with a sense of emotional release and avenues for creating new friendships. Improvements in interpersonal skills were seen as ways to become better parents or spouses in the home, or effective managers in the work place. Several respondents found learning to be a way to stretch their intellectual capacities. Three respondents said they were trying to learn how to read in order to comprehend what they constantly saw in writing. For others, learning was a way to survive in a world in which they felt powerless.

VI. LEARNING "NEXT YEAR"

When asked what they would like to learn "next year," 53 respondents identified 167 possible activities, or an average of 3.15 activities per respondent.

Several respondents, when asked, "Would you like to learn

anything new next year?" found the question difficult to answer. A bookkeeper who had pursued more than ten new activities in the past year responded with "What ever comes my way." The time perspective for several older respondents was too constricted for them to specifically consider learning something new; a widow repied "If I'm still around." One older respondent, when asked the question about learning something new, experienced a different kind of time perspective. Her mind went back to when she was still a young child. She recalled the death of her father, a pioneer army test pilot, if possible, she wanted to take flying lessons in the coming year.

Younger respondents were divided when it came to also found it difficult identifying what they would like to learn "next year." Because they are so oriented to the present, planning for the future was an unfamiliar exercize.

A. Types of Learning "Next Year"

The most frequently identified category of learning was cultural, twenty-nine percent; followed by vocational, twenty-six percent; recreational, eighteen percent; domestic, twelve percent; interpersonal, four percent; religious, four percent; medical, one percent; other, one percent; and political, less than one percent (see table 13).

1. Vocational learning

Examples of vocational learning activities respondents were

considering "next year" included: pursuing a military career in journalism, office skills, computer course, open a franchise business, attend veterinarian school, get nursing degree, become an officer in a bank, bookkeeping, open a catalog sales business, remembering names, and do tax returns (see Table 14).

2. Domestic learning

Examples of domestic learning activities "next year" were adding an upstairs room to a house, self-defense, know more about "my own" capabilities, money matters, canning, possible move to another part of the United States, tailoring, build a log cabin, gardening, and replace siding on the house (see Table 14).

3. Interpersonal learning

Examples of interpersonal learning activities "next year" were parenting, separating emotions from business, more about people, child development (see Table 14).

4. Religious learning

Examples of religious learning activities "next year" were Bible history, understanding the Bible, become more involved in church, relationship with a higher power, Reiki, and becoming a good witness for Jehovah God (see Table 14).

5. Medical learning

Three learning activities mentoned for "next year" were

"husbands health, possible operation for a deteriorated hip, and becoming more emotionally stable (see Table 14).

6. Recreational learning

Examples of recreational learning activities "next year" were woodworking and building doll houses, macrame, learning to fly, working with opal stone, making pistol grips out of agate, crafts, quilting, Christmas crafts, marlin fishing, rug braiding, photography, golf, stained glass, weaving, tole painting, boatmanship and rafting (see Table 14).

7. Cultural learning

Examples of cultural learning activities "next year" were travel to Japan, learn a new language, oil painting, constructing crucifixes out of nails, new authors, learn Spainsh, travel to Spain, travel to North Africa, German language, silk screening, Native American traditions, vocal lessons, write childrens' novels, earn high school diploma, learn to read and write, philosophy, study about mental disorders, song writing, produce movies, sculpturing etc. (see Table 14).

8. Political learning

One respondent wanted, "next year," to learn how to write grants for the city council (see Table 14).

9. Other learning

Other learning activities "next year included: learning more about being a tour guide, becoming a member of a Rotary Club, and learning about chemical abuse (see Table 14).

Why the strong interest in cultural learning? Was this the result of an in-migration of residents who were bringing with them cultural interests? Was it a goal of some community leaders to emphasize interest in the arts and culture? What role did the economic downturn have in this seeming interest in the arts and culture? Were respondents only expressing an interest in something they wished they could do? Was this expressed interest the result of neglect or emphasis on culture and the arts in the public school curriculum? What influence did the Discovery Channel have on this interest?

The researcher was suprised in his Houston study by several engineers who had not taken an interest in or were not introduced to the arts and culture in their college curricula. After they had graduated they recognized cultural voids in their lives and sought or found ways to learn about the arts and culture.

B. Information Seeking and Learning "Next Year"

For their 167 learning activities "next year," respondents indicated they would use an average of 3.37 resources for each activity. For learning "last year," respondents reported an average of 3.10 information resources for each of their 302 learning activities.

When asked to whom they would turn for information related to

learning "next year," the most frequently mentioned resource by respondents was paid teachers followed by books and magazines from libraries, themselves, friends, their own books and magazines, family, other resources, business persons, public librarians, employers, books and magazines from friends, informal groups, the media, the clergy, and physicians. Compared with learning "last year," these same respondents ranked themselves first, followed by other, their own books and magazines, friends, family, books and magazines from libraries, business persons, teachers, employers, the media, informal groups, books and magazines from friends, physicians, the clergy, and librarians (see Tables 15).

When considering learning resources to support their learning activities, respondents continued to have a love affair with books, a phenomena confirmed in the Houston and Port Townsend studies. Whether their own, from friends, or borrowed from libraries, respondents thought books would be a resource they would use. Why books? Books can be held; are portable; can be marked, copied, and reread; can, through borrowing and lending, be a means for expanding one's influence; can enable one to become an information broker; can cover just about every subject; can support one's role as a learning provider; can, for the most part, be relatively inexpensive; can, in most places, be readily available; can become an personal investment and appreciate in value; can add to a personal library; and if purchased for that purpose, can become status symbols and part of one's decor.

Forty percent of the respondents indicated they would turn to

paid teachers for information regarding their learning activities, more than a one hundred percent increase over what they had used in their real-life learning activities. Possible reasons for the increase might include an interview effect in which respondents answered according to what the researcher might be expecting. Second, respondents might identify a paid teachers as the ideal resource, they are the experts. Third, paid teachers might be part of the visible rather invisible learning network. Fourth, linking up with paid teachers might provide the respondents with an opportunities to expand their life-spaces and social contacts. Fifth, respondents might see themselves at turning points in their lives; paid teachers would be perceived as a more reliable resource than their own judgment, friends, or family.

A surprising element in information seeking in the Livingston study was the frequency with which respondents indicated they would use libraries as resources for learning "next year." Library books and magazines had been ranked second "next year," and sixth "last year." Those same library books and magazines had been rated fourteenth "last year." One possible reason for the potential use of library books to support learning activities could be the improvement in library technology and networks. A public library the size of Livingston has access to titles from around the state, region, and nation. Twenty-two percent of the respondents used the library last year; they anticipated greater use next year.

Projected use of public librarians as resources for learning was ranked ninth for "next year," and fifteenth for "last year."

At the same time, however, librarians received the highest rating for "last year." Even though they had not been as frequently identified as learning providers, it appears librarians were indirectly, through borrowing library resources, being considered in the information seeking process for "next year" (see Table 16).

Professionals such as teachers, clergypersons, physicians, and librarians are generally associated with visible networks. Respondents, although anticipating an increased use of teachers, did not see themselves increasing their use of other professionals. They continued to see themselves turning to invisible networks of learning that consisted of friends, family, colleague, employers, and businesspersons.

Invisible networks of learning were first reported in the Port Townsend study. The concept, however, was first recognized while field testing the researcher's interview instrument for his doctoral work. Field tested at a branch of the Houston Public Library and at the Bryan Public Library, it was during those field tests that the researcher first conceived of the learning sociogram based on Moreno's work in sociodrama (1953). Constructing rude learning sociograms for each member of the staffs led to the discovery that learning networks existed.

It was the evidence of invisible networks of learning that presented the need for a follow-up study and the Livingston project.

VII. LEARNING PROVIDERS AND NETWORKS OF LEARNING

To discover who the Livingston learning providers were, a brief interview instrument was designed containing the following questions: what subjects the learning provider was teaching, what sizes of groups he or she was teaching, what settings in which he or she was teaching, how long he or she had been teaching, why did he or she begin teaching, did he or she acquire teaching skills Livingston, what economic benefits did he or she gain from teaching, and, did the learning provider know anybody else who might teaching? In that this was exploratory research designed to raise questions for further research, demographic questions were excluded.

It must be noted that the researcher identified the learning provider as a teacher. "Teacher" in this study is not to be confused with the professional trained classroom teacher, nor does the term connote a full-time occupation. The learning provider is one to whom the learner turns to learn about a particular skill or information about that skill.

Mr. Jeff Shada, a graduate student at Montana State University and a resident of Livingston, conducted this phase of the study. Thirty learning providers were identified and interviewed by Shada (1988).

A. Subjects Taught by Learning Providers

Thirty learning providers indicated they had taught a total of 60 subjects in four major areas: vocational, domestic, recreational, and cultural learning (see Table 17).

B. Size of Groups Taught by Learning Providers

Learning providers taught in groups ranging in sizes of 1 to 150. The most frequently mentioned size, one-to-one, enabled learning providers to establish personal contact through how-to tutoring, and was used for such learning activities as health and pre-natal care, adult basic education tutoring, geneological studies, self-improvement awareness, pine-needle basket weaving, candle making, spinning, weaving, pottery, western history and culture, survival and home life skills, personal hygiene, job search skills, sewing, social support, financial planning, mountain Yoga, and agricultural services. In some instances some of the above courses were also taught in small and large groups, depending on the circumstances and demand (see Table 18).

Some of the one-on-one learning activities were provided by members of the visible networks of learning including the county health department, county extension, and other county and state services; some of the tutoring was provided by entrepreneurs such as the crafts person who was teaching candle making, spinning, weaving, and pottery in his shop. Less visible, the learning provider who taught pine-needle weaving, did so in her home.

Some learning activities were regularly scheduled, others were seasonal, and others irregularly met by concensus of learning providers and learners. Regularly scheduled meetings tended to meet in groups; irregularly scheduled transactions were more likely to meet in small groups or one-to-one. The county health

department was a government agency that irregularly scheduled home visits in which one-to-one transactions occurred. Three respondents in the first part of the study reported attending a series of seminars on community awareness. The seminars were designed to create in the minds of Livingston residents a more positive outlook toward the community's economic future. Approximately 300 residents attended the two eight hour sessions.

C. Settings in Which Learning Providers Taught

Learning providers reported that they most frequently taught in their places of employment. Other settings in which they taught included their homes, institutions including the library museum, school, and city-county building and a variety of other settings including a mountain house, motor inn, outdoors, streamside, athletic club, in the field, Danforth Gallery, and the fire hall. Learning providers tended to operate in settings that were familiar to them, not the learners. Demand frequently determined whether the settings were visible and invisible (see Table 19).

D. Years Learning Providers Have Been Teaching

As noted earlier, the term teaching did not imply that the learning provider is teaching full time; it was stipulated that he or she has taught at least one subject in the previous twelve months. Approximately 39 percent of the learning providers have been teaching less than five years; twenty-one percent have been teaching more than ten years; forty percent have been teaching

between five and ten years (see Table 20).

Shada added the following observation. "It appears that many who were providers last year no longer do so, and many new providers appear on the scene from time to time. Livingston as a community has had much of it's population relocated and also new influences in the community have brought new residents to the area. This transition has caused a loss of some learning providers, but has also brought many new ones into Livingston. Many of these new providers appear to be well-educated and are offering a wide variety of learning opportunities within the community."

E. Why Learning Providers Have Been Teaching

When asked why they were teaching, learning providers were given a list of twelve reasons from which they could select the most appropriate answers. The list included "It was at the request of friends, it was at the request of my employer, it was something I felt I had to do, it was something I volunteered to do, it was my primary job responsibility, it was something my educational training prepared me to do, it was a way to earn extra money, it was the result of success with a personal hobby, it was something an organization asked me to do, it was the result of a crisis in my life, it was the result of a crisis in my family, and other. No one response was dominant. The most frequent responses were: it was something I felt I had to do, twelve percent; it was something I volunteered to do, fourteen percent; and, it was something my educational training prepared me to do, sixteen

percent (see Table 21).

Under other were included the following: (I) perceived a need within the library to provide learning opportunities. The library is not just a resource any more. (It was a) personal desire and my hobby. (I) felt a need within the community. Work experience prepared me for the work. (My) former husband had a parent who was hearing impaired. I really enjoy teaching adults. My own experiences. Strangers were impressed with my works and encouraged me to teach. I sensed a need within the community.

F. Were Learning Provider Skills Learned in Livingston?

Learning providers seemed to have struggled with this question. Most indicated they did not learn their skills in Livingston, confirming Shada' previous observation.. Pine-needle basket weaving was learned in Oregon. A museum director received her training in Florida. Sign language was learned in Michigan. Candle making and pottery skills were learned in California; spinning and weaving were learned in Bozeman. Natural childbirth and infant care were learned in California. Mountain Yoga was learned outside the community. Oil painting was learned in Minnesota. Dog obedience was learned in Bozeman. Skills learned in Livingston included fly tieing, history and geneology, coping and social support, personal hygiene, home life, and survival skills. Livingston sources for learning skills included on-the-job, a museum director, and a network of community agencies. One learning provider indicated sewing was self-taught.

G. Economic Benefits for Learning Providers

When asked if they earned any income from teaching adults, 32 percent of the learning providers indicated it was their sole source of income; seventeen percent indicated they did not derive income from what they were teaching; one person indicated she earned approximately $5,000 from her teaching; other respones varied from five to fifty percent of their income (see Table 22).

Shada observed that in the process of teaching, some learning providers also sold materials and supplies to learners. A woman taught sewing classes in her fabric shop. Other learning providers did not specifically indicate that they sold supplies to, it is conceivable they did.

G. Snowball Sampling for Learning Providers

In addition to the learning providers interviewed for this study, an additional 68 resources for learning were identified in Livingston. Primarily organizations, these resources included religious institutions, educational groups, veterans organizations, sporting clubs, foundations, civic clubs, hobby groups, and governmental agencies (see Table 23).

H. Summary of Learning Provider Findings

Learning providers participated in a wide range of teaching skills and at various levels of proficiency. For some it was their sole source of income; others were teaching because they liked being around people. The list Shada presented is not exhaustive,

it provides a better picture of visible learning networks than it does the invisible. As Shada noted, however, developing a stable list of learning providers from the invisible network can be frustrating. Invisible learning networks are often temporary and of short duration; they are not like formal networks that have become institutionalized. If a great enough demand presents itself, invisible networks can become formalized.

Learning providers also contribute to the economic health of a community. Some learning providers sold their skills and resources to learners; others, out of good will, traded or freely shared their skills, required resources could be purchased by the learners.

I. Suggested Follow-up Research.

Several research questions that were raised in this part of the study include the following: First, regarding accountability, are learning providers in visible networks accountable for what they are teaching? Are learning providers in invisible networks accountable for what they are teaching? Should accountability be expected? How would one go about determing whether or not accountability exists?

Second, are learning providers in visible networks as effective as learning providers in invisible networks?

Third, do learning providers in visible networks reach the same clientele as learning providers in invisible learning networks? Should they?

Fourth, what determing factors result in the formation of visible and invisible learning networks? What roles do technology, the media, politics, world events, have on the formation or demise of learning networks?

Fifth, how do in-migrating learning providers develop credibility in a community? Do they first become part of an invisible network of learning then become visible?

Sixth, what motivates adults to become learning providers, particularly in light of Lewin's research on the impact of force fields, valences, on one's life-space?

Seventh, can institutions such as schools, churches, and libraries create climates that can expand their spheres of influence by penetrating visible and invisible networks of learning? If so, how?

Eighth, are the suggested phenomenon of visible and invisible learning networks valid observations? If they are, what implications can they have for community institutions and businesses?

CONCLUSION

The purpose of this study has not only been to provide insights into adult learning, it has also been designed to raise questions. The researcher has been acutely aware that respondents were selective in what they revealed to a stranger. In some instance the interviews permitted respondents to look at themselves from a different perspective. They were asked to look at

themselves not husbands, wives, employers, employers, mothers and fathers, neighbors, but as learners. Can it be determined whether or not this approach altered the respondents' perceptions of themselves? A longitudinal study of adult learners could be means of obtaining these kinds of data.

Researchers have pointed to trigger events in the adult lifelong learning process (Cross, 1981), are there approaches that can be taken that would encourage curiosity and inquisitiveness even in the absence of trigger events?

How much of lifelong learning is an economic transaction in terms of both immediate costs and long range benefits? If the economic impact of learning on a community can clearly be determined, research should be continued to measure the impact. Does the average adult actually spend $1,000 a year learning and acquiring information about new skills? If this is a fact, how and should the information be translated to the public, educators institutions and local governments?

A troubling area in each of the researcher's studies has been the almost total lack of interest in learning about, and becoming involved in politics. Why, as one businessperson in Livingston asked, is there such apathy toward politics at the local, state, and national levels?

A second troubling area concerns the elderly. What role does Lewin's "time perspective" play in lifelong learning for the elderly? If it is a factor, and the elderly are living longer, but have a contracting time perspective, what can be done to offset

fatalism with a sense of creativity? If a long range process should be considered, when should it be implemented? At retirement? In the work place? During formal education?

A third troubling area was the involvement of four illiterates in the Livingston study. It had to be the tip of the iceberg. How can the illiterate be identified? How can they be encouraged to participate in an educational process that can rectify their problems?

A fourth troubling area in each of the researcher's studies has been the seemingly lack influence of the church on learning. Respondents frequently did not identify involvement in religious types of learning. Was this because they were not involved in the kinds of religious learning that they could describe as new and having an impact on them? Were they uninfluenced by religious educational programs? Could it be that religious education programs were designed to close rather than open minds to inquiry?

An interesting trend uncovered in the interview was the emerging use of learning technology in the home. Respondents were using their video cassette recorders to view learning tapes as well as record programs for later review. Should adult educators try to capitalize on the proliferation of VCRs? If they should, how should they? The computer also made its presence felt in the lives of adults that had not been seen seven years earlier. How can the computer be used to enhance adult learning?

Adults are learning, three studies have confirmed that. Are

they pursuing the most effective approach to learning? Is there a most effective approach? These are observations and questions that have been raised in the Livingston study.

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Table 1

AGE AND SEX OF RESPONDENTS

AGE	MALE	FEMALE	TOTAL
18-19	1	1	2
20-29	3	5	8
30-39	7	6	13
40-49	6	2	8
50-59	5	5	10
60-69	4	7	11
70-79	3	2	5
80-89	1	1	2
90+	1	-	1
Total	31	29	60
Mean age	48.16	48.72	48.43

Table 2

RANK AND FREQUENCY OF

TYPES OF LEARNING "LAST YEAR"*

TYPE OF LEARNING	FREQUENCY	PERCENT	RANK
Vocational	92	30.59	1
Domestic	48	15.79	2
Interpersonal	19	6.25	7
Religious	16	5.26	8
Medical	23	7.57	5
Recreational	39	12.83	4
Cultural	41	13.49	3
Political	4	1.32	9
Other	21	6.95	6

*304 learning activities

LEARNING ACTIVITIES "LAST YEAR"
COST — BENEFIT

VOCATIONAL LEARNING

LEARNING ACTIVITY	RESPONDENT	COST	BENEFIT
Welfare system	High school teacher	1	1
Montana tourism	High school teacher	2	1
Newspaper computer system	Newspaper reporter	1	4
Reporter writing skills	Newspaper reporter	1	4
World events	Newspaper reporter	1	1
City council/city manager government	Street foreman	1	1
Drive a logging skidder	Homemaker	1	1
Fiber reactive dyes	Business owner	5	5
Wholesaling	Business owner	1	1
Retailing	Business owner	1	5
Built a clothing rack	Business owner	2	1
Color sense	Business owner	4	5
Trauma course	Surgeon	5	5
Scientific meeting - surgery	Surgeon	5	5
American college of surgeons meeting	Surgeon	5	5
Hand surgery	Surgeon	5	5
Clothing store management	Clerk	1	5
Marketing	Clerk	1	3
Learning from sales representatives	Clerk	1	4
Hats and fashions	Clerk	5	5
Managed a club	Club manager/carpenter	1	5
Built a house	Club manager/carpenter	5	3
Carpentry-cabinet making	Club manager/carpenter	3	1
Student teaching	Elementary teacher	5	1
Selling home improvements	Railroad clerk	5	5
Environmental regulations	Grain elevator operator	1	1
Veterinary clinic management	Veterinarian assistant	1	1
How to handle animals	Veterinarian assistant	1	3
Cardiac monitors	Registered nurse	1	1
Hemodynamic equipment	Registered nurse	1	1
Paralegal training	Paralegal secretary	2	5
Computers	Paralegal secretary	2	3
Typing	Disabled truck driver	1	1
Computer project	Bank administrative assistant	1	5
Commercial notes	Bank administrative assistant	1	1
Real estate escrow department	Bank administrative assistant	1	1
Individual retirement accounts	Bank administrative assistant	1	1
Marketing	Bank administrative assistant	2	5
How to get a new job	Unemployed homemaker	1	1
How to start a bookstore	Unemployed homemaker	1	1
Being a waitress	Unemployed homemaker	1	5
Manager, Quick Lub	Unemployed, new resident	1	5
Weather observation	Air traffic controller	5	5
Flight data--weather	Air traffic controller	5	5
FAA area rating	Air traffic controller	5	5
Pre-flight pilot briefing	Air traffic controller	5	5
In-flight position	Air traffic controller	5	5
Purchase IBM computer	Air traffic controller	5	1

*(1) $0.00, (2) $1.00-50.00, (3) $51.00-100.00, (4) $101.00-150.00, (5) $151.00+

Vocational (cont'd)

LEARNING ACTIVITY	RESPONDENT	COST	BENEFIT
CAT scanner	Nurse	1	1
PCA pumps	Nurse	1	1
Installment lending	Bank administrative officer	3	5
Real estate lending	Bank administrative officer	2	5
Commercial lending	1	1	
Bank management	Bank administrative officer	2	1
Quality control	Quality controller, sawmill	2	1
Saws	Quality controller, sawmill	1	1
Sawmill production	Quality controller, sawmill	1	1
Loan documentation	Banker	1	1
Sales training	Banker	1	1
Competitiveness of business	Sporting store owner	5	5
Selling more clothing	Sporting store owner	5	5
Ineffectiveness of advertizing	Sporting store owner	1	5
Small engine repair	Store assistant	1	4
Senior companion program	Advisor for the elderly	1	1
Aging	Advisor for the elderly	1	1
Farm and ranch real estate	Real estate broker	5	5
Commercial real estate	Real estate broker	5	5
Office computer	Real estate broker	1	5
Enter files into computer	Real estate broker	3	1
Cook, Kentucky Fried Chicken	Motel clerk	1	5
Manage front desk of inn	Motel clerk	1	5
Night audit	Motel clerk	1	3
Plumbing apprenticeship	Motel clerk	1	5
Catering	Restraurant owner	5	5
How to be more efficient	Restraurant owner	5	5
How to be an effective employer	Restraurant owner	1	5
Hired new accountant	Restraurant owner	5	1
Payrolls--bookkeeping	Restraurant owner	2	2
College bookkeeping I & II	Bookkeeper	5	5
Computers	Bookkeeper	5	5
Software for computer	Bookkeeper	5	5
Custom computer programming	Computer programmer	1	5
Software system	Computer programmer	5	5
College bookkeeping I	Bookkeeper	5	5
Accounting on the job	Bookkeeper	1	1
IRA seminars	Ass't supervisor, retail banking	1	1
Estate planning	Ass't supervisor, retail banking	1	1
Bank computer program	Ass't supervisor, retail banking	1	1
Computer input	Ass't supervisor, retail banking	1	1
Automatic dialers	Phone company salesman	1	5
Bookkeeping	Bookkeeper	1	5
Working with people on the job	Bookkeeper	1	1
Typing class	Bookkeeper	2	5
IBM word processing	Bookkeeper	5	5
	DOMESTIC LEARNING		
Family finances	High school teacher	2	5
Drying fruit	Disabled/retired railroad worker	1	1
Ferrets	Elderly homemaker	5	1
Canary	Elderly homemaker	2	1
Herbs	Elderly homemaker	2	1
Diets	Elderly homemaker	2	1

Domestic (cont'd)

LEARNING ACTIVITY	RESPONDENT	COST	BENEFIT
Conditioning self to face life	Elderly homemaker	1	1
Purchased computer	Administrative aide	5	1
Driving a different car	Elderly homemaker	1	1
Personalized photo album	Homemaker	5	1
Remodeling grandfather's house	Business owner	2	1
Investing	Clerk	5	5
Setting new goals	Clerk	3	5
Auto tune-ups	Club manager/carpenter	2	1
Planting a garden	Elementary teacher	2	2
Investments	Railroad clerk	5	5
Earl Nightengale self-esteem course	Railroad clerk	5	1
Dessert recipes	Veterinarian assistant	4	1
Canning meats	Nurse	4	1
New sewing machine	Nurse	5	5
Plants	Paralegal secretary	4	1
Learning to survive	Laborer on welfare	1	5
Refinishing antique furniture	Unemployed homemaker	!	!
Upholstering	Nurse	3	1
Pet bird	Elderly homemaker	2	1
Improving a yard	Quality controller, sawmill	1	5
Real estate	Quality controller, sawmill	1	1
Investments	Quality controller, sawmill	2	5
Household budgeting	Homemaker	1	1
New family role	Banker	1	1
Sold a home	Sporting store owner	5	5
Cooked a whole pig	Real estate broker	5	1
Bought a stereo	Motel clerk	5	2
Auto tune-up	Motel clerk	3	1
Learning about ancestors	Restraurant woner	5	1
Stock market analysis	Computer programmer	5	1
Emotions anonymous	Bookkeeper	3	1
Bank financing	Bookkeeper	1	1
Addition to house	Ass't supervisor, retail banking	5	1
Personal investments	Ass't supervisor, retail banking	1	5
Addition to house	Phone company salesman	5	1
Raising chickens	Phone company salesman	4	1
Refinishing furniture	Homemaker	2	1
Caring for mother in own home	Elderly homemaker	1	1
Park County museum/Livingston history	Street foreman	1	1
The children and divorce	Bookkeeper	1	1

INTERPERSONAL LEARNING

Grandson	Administrative aide	2	1
Body language	Administrative aide	2	1
Codependence, people skills	Business owner	5	5
Assertiveness--auto transmission	Business owner	2	5
Examining marriage	Business owner	1	1
Learning about people	Widow, house painter	1	2
Working with the public	Clerk	3	5
Relationship with parents	Clerk	3	5
Fourteen year-old daughter	Paralegal secretary	5	2

Interpersonal (cont'd)

LEARNING ACTIVITY	RESPONDENT	COST	BENEFIT
Communicating with people	Paralegal secretary	3	1
Social skills	Bank administrative officer	1	1
Relating to people	Quality controller, sawmill	1	1
Twin grandchildren	Recently widowed homemaker	2	1
Better react with people	Sporting store owner	1	5
Patience on-the-job	Store assistant	1	1
Parenting	Restraurant owner	5	1
Women in transition	Bookkeeper	2	1
Grandparenting	Bookkeeper	5	1
Being the working mother	Bookkeeper	2	1
RELIGIOUS LEARNING			
Pastoral council, church	Disabled/retired railroad worker	1	1
Church educational committee	Disabled/retired railroad worker	1	1
Self-discipline, Bible reading	Newspaper reporter	1	1
Teaching adult church school	Retired high school teacher	1	1
Organizing state church convention	Retired high school teacher	1	1
School of missions	Retired high school teacher	1	1
Life study course on the Bible	Railroad clerk	3	1
Class on healing	Unemployed homemaker	3	1
Metaphysical spirituality	Unemployed homemaker	5	1
Blood (Jehovah's Witnesses)	Elderly homemaker	2	1
God's kingdom	Elderly homemaker	2	1
School on the Bible	Elderly homemaker	2	1
Native American religions	Elementary school teacher	3	1
Religious education--sacraments	Bookkeeper	1	1
Rite of Christian initiation	Bookkeeper	1	1
MEDICAL LEARNING			
AIDS	High school teacher	1	1
Degenerating discs in back	Disabled/retired railroad worker	5	1
Husband's emphysema	Elderly homemaker	5	1
Daughter's depression	Elderly homemaker	3	1
Hip replacements	Widowed homemaker	5	1
Daughter's hip	Homemaker	5	1
Surgery, teflon knees	Widow, house painter	1	4
Personal health, dieting	Railroad clerk	3	1
Heart attack	Elderly man	5	1
Mother's cancer	Nurse	2	1
Father's terminal illness	Homemaker	5	1
IV machine for morphine	Homemaker	1	1
Father-in-law's terminal illness	Truck driver	5	1
Coping with death	Recently widowed homemaker	5	1
Father-in-law, bone cancer	Recently widowed homemaker	1	1
Wife's surgery	Banker	1	1
Personal counseling	Bookkeeper	2	1
Husband's inhaler	Elderly homemaker	2	1
Husband's eyesight	Elderly homemaker	1	1
Diabetes	Retired state representative	2	1

Medical (cont'd)

LEARNING ACTIVITY	RESPONDENT	COST	BENEFIT
Balancing diet	Retired state representative	1	1
Diabetes	Bookkeeper	2	1
	RECREATIONAL LEARNING		
Raquetball	High school teacher	5	1
Tieing flies	Disabled/retired railroad worker	4	1
Oragami	Administrative aide	2	1
Tanning snake hides	Retired railroad worker	2	1
Golf lessons	Homemaker, school board member	3	1
Cabinet making	Surgeon	5	1
Needlework	Clerk	3	1
Stamp collecting	Veterinarian assistant	2	1
Golf lessons	Disabled truck driver	2	1
Braiding rugs	Bank administrative assistant	2	1
Camera, photography class	Unemployed homemaker	5	1
Horse	Unemployed, new resident	5	1
New camera, photography	Air traffic controller	5	
Astronomy	Air traffic controller	2	
Basket weaving	Nurse	2	1
Stamp collecting	Bank administrative officer	2	1
Woodworking	Bank administrative officer	3	1
Tieing flies/fly fishing	Quality controller, sawmill	2	1
Bird hunting	Quality controller, sawmill	2	1
Tropical fish	Homemaker	5	1
Tropical fish	Truck driver	5	1
Fishing	Banker	5	1
Tieing flies	Banker	4	1
Golf lessons	Banker	3	1
Golf lessons	Restraurant owner	5	1
New video camera	Restraurant owner	5	1
Quilting	Bookkeeper	4	1
Wheat weaving	Bookkeeper	2	1
Pine needle basketry	Bookkeeper	2	1
Italic hand writing	Bookkeeper	2	1
Decorating sweatshirts	Bookkeeper	3	2
Ceramics chalking class	Ass't supervisor, retail banking	2	1
Calligraphy	Ass't supervisor, retail banking	1	2
Hunting/archery	Phone company salesman	5	1
Tropical fish	Phone company salesman	2	1
Rock climbing	Phone company salesman	2	1
Wilderness survival	Phone company salesman	1	1
Crossword puzzles	Recently widowed homemaker	2	1
Needlecraft	Bookkeeper	2	1
Pottery class	Elementary teacher	5	1
	CULTURAL LEARNING		
Judaism	High school teacher	5	5
Mythology--Joseph Campbell	High school teacher	2	1
Ancient Egypt	High school teacher	5	5
The American west	High school teacher	5	5
The Holocaust	High school teacher	5	5

Cultural (cont'd)

LEARNING ACTIVITY	RESPONDENT	COST	BENEFIT
Travel to Greece	High school teacher	5	5
Native Americans	Elderly homemaker	2	1
Flannery O'Conner, author	Newspaper reporter	2	1
College course, new authors	Newspaper reporter	5	1
College course, French language	Newspaper reporter	5	1
Creative writing	Newspaper reporter	1	2
Watercolors	Administrative aide	2	1
Foreign exchange student	Homemaker	5	1
Literature	Homemaker	1	1
Native Americans	Business owner	2	1
Art work	Clerk	2	1
Learning about Livingston	Clerk	2	1
College course, sign language	Elementary teacher	5	1
Writing class	Veterinarian assistant	5	1
How other people live (Discovery channel)	Elderly homemaker	5	1
Dance lessons	Paralegal secretary	3	1
Piano	Paralegal secretary	5	5
Poetry	Paralegal secretary	1	1
Sculpture sitting	Retired air force administrator	1	1
Directed a play	Retired air force administrator	4	1
Acted in a play	Retired air force administrator	2	1
Russian language	Retired air force administrator	3	1
Lewis & Clark Trail Heritage Foundation	Retired air force administrator	4	1
Learning new words	Elderly homemaker	2	1
Far east (Discovery channel)	Recently widowed homemaker	1	1
Learning to read	Advisor for the elderly	1	1
German language	Motel clerk	1	1
Become more community oriented	Restraurant owner	1	3
Henry VIII, history of the English	Bookkeeper	3	1
Guitar	Computer programmer	2	1
Amadenda	Elementary school teacher	1	2
Percussion instruments	Elementary school teacher	2	2
Psychology	Elementary school teacher	2	1
Native American beadwork	Elementary school teacher	4	1
Travel to southwest United States	Elderly homemaker	5	1
Travel to Hawaii	Bookkeeper	5	1
College course, microbiology	Veterinarian assistant	5	5
POLITICAL LEARNING			
Crossfire, TV	Retired city employee	1	1
Apathy of people toward politics	Sporting store owner	1	1
Applying for grants for the city	Phone company salesman	3	1
City manager form of government	Phone company salesman	1	1
OTHER LEARNING			
Positive thinking seminars	Street foreman	1	1
Psychology--imposter syndrome	Administrative aide	2	1
Humor in the workplace	Administrative aide	3	1
Jokebook humor	Administrative aide	2	1
People's court--TV	Retired city employee	1	1

Other (cont'd)

LEARNING ACTIVITY	RESPONDENT	COST	BENEFIT
Tutoring college student	Retired high school teacher	1	2
Moral issue about drugs	Business owner	3	1
Labor negotiations seminar	Homemaker, school board member	3	1
School finance seminar	Homemaker, school board member	2	1
School law	Homemaker, school board member	2	1
Becoming a grandmother	Unemployed homemaker	1	1
Birds	Elementary school teacher	2	1
Stars	Elementary school teacher	2	1
Animals	Elementary school teacher	2	2
Wild flowers	Elementary school teacher	2	1
Trees	Elementary school teacher	2	5
Demolition derby	Phone company salesman	1	1
Positive thinking seminars	Phone company salesman	1	1
Landscaping for city hall	Phone company salesman	1	1
Outdoor musical concert	Phone company salesman	5	1
Travel tour guide for senior citizens	Retired rancher	1	5
Marketing live rainbow trout	Bookkeeper	1	5

Table 4

FREQUENCY USE AND RATING OF RESOURCES FOR LEARNING ACTIVITIES "LAST YEAR"*

	FREQUENCY			RATING	
Resource	Frequency of Use**	Percent	Rank Order	Rating of Resources***	Rank Order
Own self	145	47.69	1	3.77	10
Family	79	25.99	5	4.18	5
Own books/magazines	97	31.91	3	4.02	7
Books/magazines from friends	41	13.49	12	3.76	11
Books/magazines from libraries	68	22.37	6	3.53	15
Media, T.V., Radio, Newspapers	47	15.46	10	3.55	14
Friends	94	30.92	4	3.95	9
Informal group	46	15.13	11	3.70	12
Clergy	17	5.59	14	4.24	4
Physician	21	6.91	13	4.29	2
Employer	47	15.46	10	3.57	13
Paid teacher	54	17.76	8	4.28	3
Public librarian	7	2.30	15	4.43	1
Businessperson	63	20.72	7	3.98	8
Other	110	36.18	2	4.05	6

*304 learning activities
**936 resources
***(1) No satisfaction, (2) Little satisfaction, (3) Satisfied, (4) Much satisfaction, (5) Complete satisfaction

Table 5

WHY RESPONDENTS PURSUED LEARNING ACTIVITIES*

REASONS	FREQUENCY	PERCENT
Necessity	111	36.75
Curiosity	75	24.83
Chance	22	7.28
Through an acquaintance	43	14.24
Other**	53	17.55

*304 learning activities

**Included enjoyment, selected to participate, wife talked me into doing it, fulfillment of childhood experiences, etc.

Table 6

SETTINGS FOR RESPONDENTS' LEARNING ACTIVITIES*

SETTINGS	FREQUENCY**	PERCENT
Formal classroom	66	21.85
Informal group	99	32.78
With another person	204	67.55
Alone	195	64.55
Other***	23	7.62

*304 learning activities

**More than one response permitted. Total responses: 587

***Other included: Congregation, network, drawing on past experiences as a teacher, wrote to companies, reading and watching the media, on-the-job, business office, nature, pet store, customer relations, out of my own experiences.

Table 7

ECONOMIC COSTS AND BENEFITS OF LEARNING BY AGE AND SEX

MALES

AGE	TOTAL PROJECTS	ECONOMIC COSTS $0.00	$1.00 50.00	$50.00 100.00	$101.00 150.00	$151.00+	MEAN	ECONOMIC BENEFITS $0.00	$1.00 50.00	$50.00 100.00	$101.00 150.00	$151.00+	MEAN
18-18n=1	7	5	-	1	-	1	1.86	2	1	1	-	3	3.14
20-29n=3	14	7	2	1	-	4	2.43	7	1	1	2	3	2.50
30-39n=7	60	17	14	3	1	25	3.05	39	1	1	-	19	2.27
40-49n=6	24	14	1	2	2	5	2.29	19	-	-	-	5	1.83
50-59n=5	20	3	1	2	1	13	4.00	8	-	-	-	12	3.40
60-69n=4	7	6	1	-	-	-	1.14	5	1	-	1	-	1.57
70-79n=3	8	3	2	1	2	-	2.25	7	-	-	-	1	1.50
80-89n=1	2	2	-	-	-	-	1.00	2	-	-	-	-	1.00
91+ n=1	1	-	-	-	-	1	1.00	1	-	-	-	-	1.00
Total	143	57	21	10	6	49	2.78	90	4	3	3	43	2.34
						FEMALES							
19-19n=1	11	3	2	4	-	2	2.82	3	-	1	1	6	3.64
20-29n=5	37	11	10	2	2	12	2.84	25	2	1	-	9	2.08
30-39n=6	45	22	12	2	2	7	2.11	34	4	-	-	7	1.71
40-49n=2	13	3	4	3	1	2	2.62	9	1	1	-	2	1.85
50-59n=5	23	4	8	4	1	6	2.87	17	1	-	-	5	1.91
60-69n=7	24	7	10	2	-	5	2.42	22	1	-	1	-	1.67
70-79n=2	7	1	6	-	-	-	1.86	7	-	-	-	-	1.00
80-89n=1	1	1	-	-	-	-	1.00	1	-	-	-	-	1.00
90+ n=0	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	161	52	52	17	6	34	2.49	118	9	3	2	29	1.85

Table 8

AGE AND ECONOMIC COSTS FOR LEARNING ACTIVITIES

AGE	$0.00	$1.00 50.00	$51.00 100.00	$101.00 150.00	$151.00+	TOTAL	MEAN
18-19	8	2	5	-	3	18	2.33
20-29	26	11	3	2	12	54	2.31
30-39	37	23	5	3	32	100	2.70
40-41	17	5	5	3	7	37	2.41
50-59	9	11	6	2	15	43	3.07
60-69	13	11	2	-	5	31	2.13
70-79	4	8	1	2	-	15	2.07
80-89	3	-	-	-	-	3	1.00
90+	-	-	-	-	1	1	5.00
Total	117	71	27	12	75	302	2.53

Table 9

ECONOMIC COSTS AND BENEFITS OF LEARNING BY EDUCATION AND SEX

MALES

EDUCATION	TOTAL PROJECTS	ECONOMIC COSTS $0.00	$1.00 50.00	$51.00 100.00	$101.00 150.00	$151.00+	MEAN	ECONOMIC BENEFITS $0.00	$1.00 50.00	$50.00 100.00	$151.00 150.00	$151.00+	MEAN
0- 8n= 3	5	5	-	-	-	-	1.00	3	-	-	1	1	2.40
9-11n= 3	7	2	1	1	-	3	3.14	4	-	1	-	2	2.43
12 n=13	53	21	9	3	2	18	2.75	32	2	2	-	17	2.40
13-15n= 4	31	13	3	2	2	11	2.84	25	-	-	-	6	1.77
16 n= 3	14	4	3	3	-	4	2.79	7	-	-	-	7	3.00
17+ n= 5	33	12	5	1	2	13	2.97	19	2	-	2	10	2.45
Total	143	57	21	10	6	49	3.18	90	4	3	3	43	2.34

FEMALES

0- 8n= 3	9	3	5	-	-	1	2.00	9	-	-	-	-	1.00
9-11n= 2	6	4	-	-	-	2	2.33	3	1	-	1	1	2.33
12 n=10	55	17	14	8	1	15	2.69	40	-	1	1	13	2.04
13-15n= 5	36	19	10	2	-	5	1.94	29	2	-	-	5	1.61
16 n= 8	51	9	21	5	5	11	2.76	33	6	2	-	10	1.98
16+ n= 1	4	-	2	2	-	-	2.00	4	-	-	-	-	1.00
Total	161	52	52	17	6	34	2.49	118	9	3	2	29	1.85

Table 10

ECONOMIC COST OF LEARNING ACTIVITIES*

COST	FREQUENCY	PERCENT
$ 0.00	109	35.86
1.00- 50.00	73	24.01
51.00-100.00	27	8.81
101.00-150.00	12	3.95
151.00+	83	27.30

*304 learning activities

Table 11

ECONOMIC BENEFIT FROM LEARNING ACTIVITIES*

BENEFIT	FREQUENCY	PERCENT
$ 0.00	208	68.42
1.00- 50.00	12	3.95
51.00-100.00	6	1.97
101.00-150.00	5	1.64
151.00+	73	23.17

*304 learning activities

Table 12

ECONOMIC COSTS AND BENEFITS OF LEARNING ACTIVITIES BY TYPES OF LEARNING

TYPES OF LEARNING		$0.00	$1.00 50.00	$51,00 100.00	$101.00 150.00	$151.00+	MEAN	$0.00	$1.00 50.00	$51.00 100.00	$101.00 150.00	$151.00+	MEAN
Vocational	n=94	52	9	4	1	28	2.37	38	2	5	4	45	3.17
Domestic	n=45	13	10	4	4	14	2.91	33	2	-	-	10	1.93
Interpersonal	n=19	6	6	3	-	4	2.47	12	2	-	-	5	2.16
Religious	n=15	8	3	3	-	1	1.86	15	-	-	-	-	1.00
Medical	n=22	7	5	1	1	8	2.91	21	-	-	1	-	1.18
Recreational	n=41	2	18	5	3	13	3.17	38	2	-	-	1	1.15
Cultural	n=42	10	12	3	3	14	2.98	32	3	1	-	6	1.69
Political	n= 4	3	-	1	-	-	1.50	4	-	-	-	-	1.00
Other	n=22	9	9	3	-	1	1.86	18	2	-	-	2	1.45
Total	304	110	72	27	12	83	2.63	211	13	6	5	69	2.04

Table 13

TYPE OF LEARNING "NEXT YEAR"*

TYPE OF LEARNING	FREQUENCY	PERCENT	RANK
Vocational	44	26.35	2
Domestic	21	12.57	4
Interpersonal	8	4.79	5
Religious	7	4.19	6
Medical	3	1.80	8
Recreational	31	18.56	3
Cultural	49	29.34	1
Political	1	.60	9
Other	3	1.80	8

*167 possible learning activities

LEARNING ACTIVITIES "NEXT YEAR"

VOCATIONAL LEARNING

LEARNING ACTIVITY	RESPONDENT
Army journalism	Newspaper reporter
Army discipline	Newspaper reporter
Possible retirement/new job	Road foreman
Counseling classes	Road foreman
Work in public store	Widowed homemaker
Brush up on office skills	Widowed homemaker
Computer course	Widowed homemaker
Medical practice	Surgeon
Management skills	Clerk
Increase carpentry skills	Club manager/carpenter
Substitute teaching	Elementary teacher
Selling	Railroad clerk
Open my own franchise	Railroad clerk
Veterninarian school	Veterinarian assistant
New nursing skills	Nurse
Get bachelor's degree in nursing	Nurse
Paralegal work	Paralegal secretary
Computers	Paralegal secretary
College classes for accounting	Disabled truck driver
Computers	Disabled truck driver
Real estate	Banking administrative assistant
Management	Banking administrative assistant
Officer in a bank	Banking administrative assistant
Find a steady job	Unemployed handyman
Counseling classes	Unemployed homemaker
Open a bookstore	Unemployed homemaker
Forestry	Unemployed, new to Montana
Flight service data processing	Air traffic controller
On-the-job training	Nurse
Bank management	Bank administrative officer
Quality control	Quality controller, sawmill
Bookkeeping	Homemaker
Accounting	Homemaker
Sales training classes	Banker
Catalog business	Sporting store owner
Small engine repair	Store assistant
Farm and ranch real estate	Real estate broker
Commercial real estate	Real estate broker
Remembering names	Real estate broker
Expand business	Restraurant owner
Typing	Bookkeeper
Bookkeeping/accounting	Computer programmer
Do tax returns	Bookkeeper
Better myself at bank	Ass't supervisor, retail banking

DOMESTIC LEARNING

Add a room to the house	Elderly homemaker
Handyman around home	Newspaper reporter

Domestic (cont'd)

LEARNING ACTIVITY	RESPONDENT
Learn more about my capabilities	Clerk
Handle money better	Clerk
Auto mechanics	Club manager/carpenter
Canning	Elementary teacher
Possible move to Fort Worth	Railroad clerk
Keep my mind open about my qualifications	Railroad clerk
Tailoring	Nurse
Plants	Paralegal secretary
Be more healthy	Paralegal secretary
Cooking	Elderly homemaker
Investing	Quality controller, sawmill
Real estate	Quality controller, sawmill
Build a log cabin	Truck driver
How to relax	Real estate broker
Invest in property	Restraurant owner
Gardening	Elementary teacher
Personal investments	Ass't supervisor, retail banking
Put siding on house	Phone company salesman
INTERPERSONAL LEARNING	
Parenting	Newspaper reporter
Learn how to separate emotions from business	Business owner
How to argue better	Business owner
Parenting	Nurse
Relationship with teenage daughter	Paralegal secretary
Interpersonal relationships	Unemployed homemaker
More about people	Quality controller, sawmill
Child development	Ass't supervisor, retail banking
RELIGIOUS LEARNING	
Bible history	Newspaper reporter
Understanding the Bible	Newspaper reporter
Be more involved in the church	Homemaker
Relationship with a higher power	Business owner
Bible study	Nurse
Reiki	Unemployed homemaker
Good witness for Jehovah God	Elderly homemaker
MEDICAL LEARNING	
Husband's health	Elderly homemaker
Hip deterioration	Widowed homemaker
Become more emotionally stable	Bookkeeper
RECREATIONAL LEARNING	
Woodworking--doll houses	Disabled/retired railroad worker
Macrame	Elderly homemaker

Table 14 (cont'd)

Recreational (cont'd)

Self-defense course	Elderly homemaker
Fly an airplane	Elderly homemaker
Work with opal stone	Retired railroad worker
Make agate pistol grips	Retired railroad worker
Crafts	Homemaker
Make quilts	Widow, house painter
Christmas crafts	Elementary teacher
Water skiing	Elementary teacher
Marlin fishing	Grain elevator operator
Raquetball	Veterinarian assistant
Winter camping	Veterinarian assistant
Rub braiding	Nurse
Photography	Elderly man
Golf	Bank administrative assistant
Furniture for pre-schoolers	Retired rancher
Trichem painting	Elderly homemaker
Woodworking	Nurse
Woodworking	Bank administrative officer
Fishing	Quality controller, sawmill
Stained glass	Banker
Weaving with a loom	Banker
Golf	Real estate broker
Golf	Restraurant owner
Woodworking	Computer programmer
Tole painting	Assistant supervisor, banking
Hunting	Phone company salesman
Boatsmanship--rafting	Phone company salesman
Rock climbing	Phone company salesman
Wilderness survival	Phone company salesman

CULTURAL LEARNING

History course	High school teacher
Trip to Japan	High school teacher
Learn a new language	High school teacher
Make crucifixes out of nails and railroad spikes	Retired/disabled railroad worker
Oil painting	Retired/disabled railroad worker
Play the organ	Elderly homemaker
New authors	Newspaper reporter
Learn Spanish	Retired railroad conductor
Travel to Spain	Retired high school teacher
Travel to North Africa	Retired high school teacher
Travel to the Holy Lands	Retired high school teacher
Learn German	Retired high school teacher
Piano lessons	Homemaker
Silk screening	Business owner
Using new colors in oils	Business owner
Story telling class	Business owner
Native American traditions	Business owner
Voice lessons	Clerk
Develop artistic skills	Clerk
Guitar	Veterinarian assistant

Table 14 (cont'd)

Cultural (cont'd)

LEARNING ACTIVITY	RESPONDENT
Piano lessons	Paralegal secretary
Publishing poetry	Paralegal secretary
Dancing	Paralegal secretary
Travel	Unemployed homemaker
Write childrens novels	Unemployed homemaker
College math courses	Air traffic controller
Sculpturing	Retired air force administrator
Travel to Russia	Retired air force administrator
Speed reading	Bank administrative officer
History of the west	Bank administrative officer
High school diploma	Homemaker
Learn to read	Truck driver
Learn to write	Truck driver
Travel	Advisor to the elderly
Attend college	Motel clerk
Business classes	Motel clerk
Art classes	Bookkeeper
Guitar	Computer programmer
History	Computer programmer
Philosophy	Computer programmer
Play the piano	Bookkeeper
Classes in sociology	Bookkeeper
Classes in psychology	Bookkeeper
Classes in mental disorders	Bookkeeper
Song writing	Elementary teacher
Movie making	Elementary teacher
Study history	Elementary teacher
Guitar	Assistant supervisor, banking
Attend classes at college	Assistant supervisor, banking
POLITICAL LEARNING	
Grants for city hall	Phone company salesman
OTHER LEARNING	
Tour guide	Retired rancher
Rotary club	Quality controller, sawmill
Chemical abuse	Bookkeeper

Table 15

FREQUENCY USE OF RESOURCES FOR LEARNING PROJECTS IN LIVINGSTON, MONTANA

Resource	"LAST YEAR" Frequency of Use*	"LAST YEAR" Percentage of Projects**	"LAST YEAR" Rank Order	"NEXT YEAR" Frequency Of Use§	"NEXT YEAR" Percentage of Projects§§	"NEXT YEAR" Rank Order
Own self	145	47.69	1	59	35.33	3
Family	79	25.99	5	42	25.15	7
Own books/magazines	97	31.91	3	47	28.14	5
Books/magazines from friends	41	13.49	12	25	14.97	11
Books/magazines from libraries	68	22.37	6	61	36.53	2
Media, T.V., Radio, Newspapers	47	15.46	10	21	12.57	13
Friends	94	30.92	4	55	32.93	4
Informal group	46	15.13	11	38	22.75	12
Clergy	17	5.59	14	12	7.19	14
Physician	21	6.91	13	6	3.59	15
Employer	47	15.46	10	26	15.57	10
Paid teacher	54	17.76	8	67	40.12	1
Public librarian	7	2.32	15	30	17.96	9
Businessperson	63	20.72	7	32	19.16	8
Other	110	36.18	2	42	25.15	7

*Total resources "Last Year:" 936
**304 learning projects

§Total resources "Next Year:" 563
§§167 learning projects

Table 16

RATING OF RESOURCES FOR LEARNING PROJECTS "LAST YEAR" AND PROJECTED USE "NEXT YEAR" IN LIVINGSTON, MONTANA

	Rating of Resources "Last Year"		Frequency Use "Next Year"		
	Rating of Resources*	Rank Order	Frequency of Use**	Percentage of Projects***	Rank Order
Own self	3.77	10	59	35.33	3
Family	4.18	5	42	25.15	7
Own books/magazines	4.02	7	47	28.14	5
Books/magazines from friends	3.76	11	25	14.97	11
Books/magazines from libraries	3.53	15	61	36.53	2
Media, T.V., Radio, Newspapers	3.55	14	21	12.57	13
Friends	3.95	9	55	32.93	4
Informal group	3.70	12	38	22.75	12
Clergy	4.24	4	12	7.19	14
Physician	4.29	2	6	3.59	15
Employer	3.57	13	26	15.57	10
Paid teacher	4.28	3	67	40.12	1
Public librarian	4.43	1	30	17.96	9
Businessperson	3.98	8	32	19.16	8
Other	4.05	6	42	25.15	7

*(1) No satisfaction, (2) Little satisfaction, (3) Satisfied, (4) Much satisfaction, (5) Complete satisfaction
**Total resources "Next Year:" 563
***167 learning projects

Table 17

SUBJECTS TAUGHT BY THIRTY LEARNING PROVIDERS

VOCATIONAL	DOMESTIC	INTERPERSONAL
Fire fighting	Pre-natal classes	Social support
Equipment training	Self-improvement	
Job search skills	Home life skills	
Plant and soil science	Personal hygiene	
Herbicide use	Sewing	MEDICAL
Computer literacy	Coping	
Pro DOS competency	Natural childbirth	First aid (2)
Vocational skills	Newborn care	CPR (2)
	Financial planning	Health care
	Investments	
	Money management	
	Dog obedience	
	Cooking	
	Fire protection	

RECREATIONAL	CULTURAL	OTHER
Fly fishing	Piano	Journal writing
Fly tieing	Organ	Accu-pressure Yoga
Crafts with fabric	Western history	Mountain Yoga
Crafts	Western culture	ACT program/DWI
Candle making	Writing	Hazardous materials
Spinning	GED preparation (2)	Astronomy
Weaving	Painting	Birds
Pottery	The arts	Community improvement
Rewadding ammunition	Historical/geneological study	
Photography	Lecture series in library	
Pine needle basket weaving	Reading	
	Sign language	

Table 18

SIZE OF GROUPS TAUGHT BY 29 LEARNING PROVIDERS

SIZE OF GROUP	FREQUENCY*	PERCENT
One-to-one	19	42.22
2- 5	2	4.44
6-10	8	17.78
11-15	3	6.67
16+	9	20.00
Other**	4	4.44

*more than one selection permitted

**Responses included: also in groups
also in groups
limit of five
small groups

Table 19

SETTINGS IN WHICH LEARNING PROVIDERS TAUGHT

SETTING	FREQUENCY*	PERCENT
Home	5	12.50
Place of employment	14	35.00
Formal classroom for credit	-	-
Classroom, non-credit	4	10.00
Institution, church, club, etc.	8	20.00
Other***	9	22.50

*more than one selection permitted

**Institutions included: library, museum, mountain house, counterpoint agency, city-county building, Yellowstone Motor Inn, school

***Other included: Outdoors, streamside; client's homes, hotel; Danforth gallery; fire hall; athletic club; fairgrounds; in the field; city-county building

Table 20

HOW LONG HAVE 28 LEARNING PROVIDERS BEEN TEACHING?

YEARS	FREQUENCY	PERCENT
0- 1	3	10.71
2- 4	8	28.57
5- 7	5	17.86
8-10	6	21.43
11+	6	21.43

Table 21

WHY 29 LEARNING PROVIDERS BEGAN TEACHING

WHY	FREQUENCY*	PERCENT
It was at the request of friends	1	2.00
It was at the request of my employer	3	6.00
It was something I felt I had to do	6	12.00
It was something I volunteered to do	7	14.00
It was my primary job responsibility	5	10.00
It was something my educational training prepared me to do	8	16.00
It was a way to earn extra money	4	8.00
It was the result of success with a personal hobby	5	10.00
It was something an organization asked me to do	2	4.00
It was the result of a crisis in my life	-	-
It was the result of a crisis in my family	-	-
Other**	9	18.00

*more than one selection permitted

**Other included:

Perceived a need within the library to provide learning opportunities. The library is not just a resource any more.

Personal desire and my hobby.

Felt a need within the community.

Work experience prepared me for the work.

Former husband had a parent who was hearing impaired.

I really enjoy teaching adults.

My own experiences.

Strangers were impressed with my works and encouraged me to teach.

I sensed a need within the community.

Table 22

INCOME EARNED AS A LEARNING PROVIDER

INCOME	FREQUENCY*	PERCENT
None	5	17.86
$1.00-100.00 a year	-	-
$101.00-500.00 a year	2	7.14
$501.00-1,000.00 a year	-	-
$5,001.00+ a year	1	3.57
It is my sole source of income	9	32.14
I barter/trade for my services	-	-
Other**	11	39.29

*28 learning providers

**Other includes the following responses:
Five percent of my business.
Difficult to determine, its considerable.
Twenty-five percent of my business.
Fifty percent of my business.
Fifty percent direct teaching, fifty percent administrative.
No set figure.
A good part of my time is spent teaching.
Ten to fifteen percent of my time.
I hope to earn my entire living on it in Livingston, its too soon to tell.
Most of my job is education.
It has helped sustain my hobby, I hope it will become part of my income.